

Mitochondrial DNA Copy Number, but Not Haplogroup, Confers a Genetic Susceptibility to Leprosy in Han Chinese from Southwest China

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Abstract

Background: Leprosy is a chronic infectious disease caused by *Mycobacterium leprae*, an unculturable pathogen with an exceptionally eroded genome. The high level of inactivation of gene function in *M. leprae*, including many genes in its metabolic pathways, has led to a dependence on host energy production and nutritional products. We hypothesized that host cellular powerhouse - the mitochondria - may affect host susceptibility to *M. leprae* and the onset of clinical leprosy, and this may be reflected by mitochondrial DNA (mtDNA) background and mtDNA copy number.

Methods: We analyzed the mtDNA sequence variation of 534 leprosy patients and 850 matched controls from Yunnan Province and classified each subject by haplogroup. mtDNA copy number, taken to be proportional to mtDNA content, was measured in a subset of these subjects (296 patients and 231 controls) and 12 leprosy patients upon diagnosis.

Results: Comparison of matrilineal components of the case and control populations revealed no significant difference. However, measurement of mtDNA copy number showed that lepromatous leprosy patients had a significantly higher mtDNA content than controls ($P=0.008$). Past medical treatments had no effect on the alteration of mtDNA copy number.

Conclusions: Our results suggested that mtDNA content, but not haplogroup, affects leprosy and this influence is limited to the clinical subtype of lepromatous leprosy.

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Introduction

Leprosy is a chronic infectious disease caused by an obligate intracellular bacillus, *Mycobacterium leprae*. According to the WHO, the total of newly registered leprosy patients in 2009 reached 211,903 and many regions in the world have not achieved the leprosy elimination goal [1]. In the regions that had achieved the elimination of leprosy, there are many new features and challenges concerning case finding [2]. Evidently, leprosy remains and will continue to be, a public health problem [1].

The genome of *M. leprae* has been well analyzed during the past decade [3–4]. A comparison with *M. tuberculosis*, has shown that more than half of the functional genes are inactivated or have become pseudogenes in the *M. leprae* genome [3–5]. These inactivated genes, many of which are predicted to be actively involved in metabolic pathways, have resulted in *M. leprae* being an intracellular parasite. The bacterium has a long half-life and has yet to be cultured *in vitro* [4,6]. During the long evolutionary erosion of its genome, *M. leprae* has developed a dependence on

host energy production and nutritional products and as a result the parasitic life and adaptation might have shaped host genetic susceptibility to leprosy [5,7,8].

Mitochondria play a key role in cellular energy supply, *in vivo* generation of reactive oxygen species (ROS), regulation of apoptosis and aging, and participation in innate immunity [9,10]. The mitochondrion contains its own DNA, mitochondrial DNA (mtDNA), which encodes 13 respiratory chain subunits, 2 ribosomal RNAs, and 22 tRNAs. Due to the specific characteristics of mtDNA, e.g. maternal inheritance, absence of recombination and high mutation rate, each mtDNA lineage accumulated mutations during evolution and a group of mtDNAs that share certain mtDNA ancestral variants can be shown to belong to distinguishable haplogroups [11,12]. Previous studies have shown that the mtDNA haplogroup background affected genetic susceptibility to many diseases, including maternally inherited diseases [e.g. Leber's hereditary optic neuropathy, LHON [13,14]], metabolic diseases [e.g. diabetes [15,16]], infectious diseases [e.g.

acquired immune deficiency syndrome (AIDS) [17] and sepsis [18]]. Whether the mtDNA haplogroup background confers a genetic susceptibility to leprosy has not been studied.

Each cell has hundreds to thousands of copies of mtDNA molecules, and the alteration of mtDNA content has long been recognized to be affected by the genetic background and factors in the physiological environment, such as thyroid hormone level [19]. mtDNA content was said to be involved in tumorigenesis (e.g. renal cell carcinoma [20] and non-Hodgkin lymphoma [21]) that had a shift of energy production from oxidative phosphorylation to glycolysis. Accumulating evidence showed that mtDNA copy number control is very important for mitochondrial biogenesis and normal cellular function [22]. Moreover, loss of mtDNA copy number was also reported as the cause of mtDNA depletion syndrome [23].

In this study, we hypothesized that erosion of the *M. leprae* genome during its evolution has led to a strong dependence on host energy production and nutritional products, and would confer a genetic susceptibility to leprosy. By dissecting the matrilineal genetic structure of case and control populations and analyzing the mtDNA content in mitochondria, which act as host cellular powerhouse and are actively involved in critical pathways for innate immunity [9,10], we may have a method of testing this hypothesis. Our comparison of mtDNA haplogroup distribution frequency and mtDNA copy number in leprosy patients and healthy controls showed that mtDNA copy number, but not haplogroup, was associated with lepromatous leprosy.

Materials and Methods

Ethics Statement

Written informed consents conforming to the tenets of the Declaration of Helsinki were obtained from each participant prior to the study. The institutional review board of the Kunming Institute of Zoology approved this study.

Subjects

The study included 534 treated leprosy patients (390 males and 144 females, age from 17 to 98 years) with detailed clinical data and 850 matched normal controls (467 males and 383 females, age from 3 to 91 years) without any history of leprosy, HIV infection and tuberculosis from nine regions of Yuxi Prefecture, Yunnan Province in Southwest China (Figure S1). The Yuxi Prefecture of Yunnan Province (north latitude 23° 19'–24° 53', longitude 101° 16'–103° 9') is historically an endemic region of leprosy [2] and contains eight counties (Jiangchuan, Chengjiang, Tonghai, Huaning, E'shan, Yimen, Xinping, and Yuanjiang) and one district (Hongta). In our recent study, we have reported the leprosy diagnosis, control, and treatment results in this region from 1952 to 2008 [2].

Patients were diagnosed on the basis of clinical presentation and histopathological features, as well as bacteriological index (if available), following the approach described in Li et al. [2]. The clinical data for those patients were described in our recent study [2], and the onset age of the patients ranged from 2 to 67 years. 283 of the patients had been diagnosed with multibacillary leprosy (MB, including lepromatous [LL], borderline-lepromatous [BL] and mid-borderline leprosy [BB] based on the Ridley–Jopling classification [24]) and 249 with paucibacillary leprosy (PB, including tuberculoid [TT] and borderline-tuberculoid [BT] leprosy on the basis of the Ridley–Jopling classification) according to the latest WHO case definition [25]. Two samples had an unclear classification of leprosy subtype due to lack of detailed information.

392 patients had been treated by Dapsone (DDS) monotherapy and/or Rifampicin (RFP), of which 34 patients experienced relapse. 142 patients had been treated with the WHO multi-drug therapy (MDT). All the relapsed patients were subsequently treated by MDT. Disability levels were graded according to the revised WHO grading system [26]. Samples from 12 newly diagnosed patients prior to any treatment were collected from Wenshan, Yunnan (7 males and 5 females, age from 13 to 80 year) (Figure S1).

Sequencing mtDNA Control Region and Haplogroup Classification

Genomic DNA was extracted from peripheral blood by using the AxyPrep™ Blood Genomic DNA Miniprep Kit (Axygen, USA). The mtDNA control region sequence of each patient and control was amplified by using primer pair (L15594, 5'-CGCCTACACAATTCTCCGATC-3'/H901, 5'-ACTTGGGT-TAATCGTGTGACC-3' or H650, 5'-GAAAGGCTAGGAC-CAAACCTA-3') [27]. PCR products were purified and sequenced following the same method described in our recent study [27,28]. Sequence variation was scored relative to the revised Cambridge reference sequence (rCRS) [29]. Each mtDNA was classified into the smallest named haplogroup according to the available mtDNA phylogeny for East Asian [11,30] by employing the same strategy in our previous studies [13,28]. For samples which could not be unambiguously classified based on the mtDNA control region sequence variation, PCR-restriction fragment length polymorphism (RFLP) analysis for haplogroup-specific coding region variant(s) was performed to justify the assignment [13,28].

Measurement of mtDNA Copy Number

Relative mtDNA copy number was measured by the fluorescence-based quantitative real-time PCR as previously described in our recent study [31]. In brief, primer pair L394, 5'-CAC-CAGCCTAACCAGATTTTC-3'/H475, 5'-GGGTTGTATT-GATGAGATTAGT-3' was used for measuring the mtDNA and the amplification of the single-copy nuclear β -globin gene (HBB502f, 5'-CTATGGGACGCTTGATGT-3'/HBB614r, 5'-GCAATCATTCGTCTGTTT-3') was used for normalization. The ratio of mtDNA to nuclear DNA, the relative mtDNA copy number, reflects the relative mtDNA content per cell. The amplification assays were performed with SYBR® Premix Ex Taq™ II kit (TaKaRa Biotechnology Co. Ltd. [Dalian, China]) according to the manufacturer's manual on the MyiQ2 system (BioRad Laboratories, Hercules, CA, USA).

Statistical Analysis

Pearson's chi-square test with a one degree of freedom was used to assess the significance of differences observed for haplogroup distribution frequencies between leprosy patients and controls. The Fisher's exact test (two tailed) was applied to those cases with cell counts below five. Principal component analysis (PCA) was performed based on the mtDNA haplogroup distribution frequency to show the overall clustering pattern of leprosy and control populations from Yuxi with reported Han Chinese populations across China (Zhang et al. [28] and references therein) by using POPSTR software (<http://harpending.humanevo.utah.edu/popstr/>).

The mtDNA copy number was compared between the case group and the control group by using Student's *t* test. Difference of mtDNA copy number among three or more groups was evaluated by one-way analysis of variance (ANOVA). Dunnett's test was

further used for multiple comparisons between any of the two groups. SPSS 15.0 was used for all statistical analysis. A P value <0.05 was considered statistically significant.

Results

Lack of Association of mtDNA Haplogroup with Leprosy

The patient and control populations from nine regions of the Yuxi Prefecture had various sample size, ranging from 16 to 164 individuals (Figure S1). We therefore pooled all the cases and controls from different regions of Yuxi as one case population and one control population for analysis, respectively, and excluded the 12 samples from Wenshan. All 1384 subjects (534 patients and 850 controls) could be classified into known haplogroups in East and South Asians [11,30] based on mtDNA variation, with a few lineages with unassigned M*, N* and R* status (Table S1). There was no significant difference in mtDNA haplogroup frequency between the patients and controls (Table 1). When the leprosy patients were classified into two groups (MB group [N = 288] and PB group [N = 256]) according to their clinical features, no haplogroup was found to be associated with leprosy subtype relative to controls (Table 1). To further demonstrate the similarity of matrilineal genetic structures of leprosy patient and control populations from Yuxi, we constructed a PC map for these two populations, together with reported Han Chinese populations across China (Zhang et al. [28] and references therein). The leprosy patient and control populations were clustered together, suggesting no essential difference between them (Figure 1). This result further indicated the absence of any association of mtDNA haplogroup with leprosy.

Increase of mtDNA Copy Number in Lepromatous Leprosy Patients

To test whether alterations of mtDNA copy number affected leprosy, we measured the mtDNA copy number in samples from 296 randomly selected patients (224 males and 72 females, age from 35 to 98 year) and 231 matched controls (142 males and 89 females, age from 13 to 85 year) from Yuxi. Twelve newly diagnosed patients prior to treatment from Wenshan were also analyzed to determine any potential effect of drug treatment on mtDNA content (Table 2). Twenty-two samples were measured twice to assess the reproducibility of our technique and we observed similar results in the two replicates.

As shown in Figure 2, there was a slight increase of mtDNA copy number in all leprosy patients (Mean \pm SD, 63.76 ± 37.45) compared to control subjects (59.46 ± 19.29) ($P = 0.086$). When we grouped the leprosy patients according to their case definition (MB versus PB), we found that the observed higher level of mtDNA copy number in leprosy patients was mainly contributed by MB patients (versus control, $P = 0.099$), although there was no significant difference of mtDNA copy number between MB group (66.21 ± 37.62 ; $n = 168$) and PB group (60.90 ± 37.40 ; $n = 138$) ($P = 0.219$; the 2 cases from Yuxi with an unclear leprosy type were excluded). Further assignment of patients according to the Ridley–Jopling classification system [24] showed that patients with lepromatous leprosy had a significantly higher level of mtDNA copy number compared to the control sample ($P = 0.008$), whereas the other types of leprosy showed no significant difference with the controls (Figure 2). We observed a significantly elevated level of mtDNA copy number in the cured patients from Yuxi with advanced age (>61 year) compared to patients with age younger than 61 ($P = 0.015$; Table 2). However, there was no essential change of mtDNA copy number with age in the controls and this observation was consistent with previous reports [20,32]. The

increased level of mtDNA copy number in Yuxi cases with advanced age was not simply caused by a greater number of LL cases in this group (32% of LL cases had an age <61 years and 68% of LL patients had an age >61 years), as we still observed a higher level of mtDNA copy number in cured patients with advanced age than in patients with young age after we excluded all LL patients ($P = 0.049$). Because there was no statistical difference in age between the MB and PB groups and among the five patient groups according to the Ridley–Jopling classification system, the increased mtDNA content in LL patients was unlikely to be caused by age difference. A comparison of mtDNA copy number in samples with different haplogroup status showed that haplogroup background did not affect mtDNA content (Table S2). Taken together, the above observed difference should be attributed to the lepromatous leprosy subtype.

To test whether long-term treatment to cure leprosy had an effect on mtDNA copy number, we measured the level of mtDNA copy number in patients who had received the different drug treatments of DDS and/or RFP (63.73 ± 36.64) and MDT (65.51 ± 40.53), and found that both groups showed similar values. Moreover, the level of mtDNA copy number in the 12 leprosy patients prior to any medical treatment was within the range of that observed in the cured patients and control subjects from Yuxi, suggesting no effect of past treatment on alteration of mtDNA copy number (Figure 2).

We followed the WHO disability grading [26], which scored different level of severity of impairment on limbs (hands and feet) and eyes, to group all patients into three groups. Intriguingly, we found that patients with no anesthesia, no visible deformity and damage, and no visual loss and other eye problem (Grade 0) had a higher level of mtDNA copy number (73.33 ± 33.98) relative to the control ($P < 0.001$). There was a decreasing tendency for the relative level of mtDNA copy number in all patients with increasing disability grading (Grade I, 66.53 ± 43.48 ; Grade II, 55.73 ± 36.69) (Figure 3). However, this tendency was not correlated with disability grade observed in LL cases (Grade 0, 83.32 ± 32.1 ; Grade I, 64.0 ± 15.7 ; and Grade II, 72.4 ± 42.7).

Discussion

In recent years, many human disorders have been reported to be associated with mtDNA haplogroup [13–18,28] and/or alteration of mtDNA content [20,21,33]. Due to the intrinsic characteristics of the eroded genome of *M. leprae*, we would expect that host mtDNA background and content would confer genetic susceptibility to leprosy. Moreover, accumulating evidence has suggested that mitochondria play an essential role in the innate immunity response to microbial infection [9,10,34], and this innate immune response may play a crucial role in determining whether mycobacterial infection progresses to the clinical disease of leprosy [35,36]. Analyses of mtDNA haplogroup distributions in case-control studies have reported positive associations of mtDNA variants/haplogroups with infectious complications and sepsis [17,18,37–39], although there are negative reports, e.g. lack of association with mtDNA haplogroups and meningococcal disease [40].

In this study, we analyzed mtDNA haplogroup distribution and mtDNA copy number variation in a large cohort of leprosy patients and matched controls from Southwest China, to test whether mtDNA variation confers a genetic susceptibility to leprosy. We found that mtDNA content, but not mtDNA haplogroup, was associated with lepromatous leprosy. To our knowledge, this is the first report to link mtDNA variation with genetic susceptibility to leprosy.

Table 1. Haplogroup frequencies and Pearson's chi-square test in leprosy patients and controls from Yuxi, Yunnan Province in Southwest China.

Haplogroup [#]	Controls		Leprosy patients			MB patients				PB patients			
	No.	No.	P-value*	OR	95% CI	No.	P-value*	OR	95% CI	No.	P-value*	OR	95% CI
C	45	19	0.134	1.515	0.876–2.620	8	0.089	1.922	0.895–4.127	10	0.416	1.336	0.663–2.691
Z	24	20	0.341	0.747	0.408–1.365	10	0.544	0.793	0.375–1.680	10	0.339	0.694	0.327–1.473
CZ	72	39	0.436	1.175	0.783–1.762	18	0.256	1.362	0.798–2.326	20	0.839	1.055	0.629–1.769
M7b	39	18	0.267	1.379	0.780–2.436	12	0.807	1.086	0.560–2.104	6	0.127	1.948	0.815–4.655
M7c	8	8	0.345	0.625	0.233–1.675	4	0.508	0.663	0.198–2.218	4	0.485	0.582	0.174–1.949
M7	47	27	0.703	1.099	0.676–1.787	17	0.763	0.916	0.517–1.622	10	0.350	1.393	0.693–2.799
M8a	17	6	0.214	1.796	0.704–4.584	2	0.185	2.867	0.658–12.488	4	1.000	1.250	0.417–3.750
M9a	24	12	0.512	1.264	0.627–2.549	5	0.330	1.615	0.611–4.275	7	0.992	1.004	0.428–2.360
M11	5	4	0.740	0.784	0.210–2.933	1	1.000	1.669	0.194–14.344	3	0.391	0.485	0.115–2.045
M12	6	7	0.256	0.535	0.179–1.601	2	1.000	0.999	0.200–4.977	5	0.069	0.347	0.105–1.146
M25	5	4	0.740	0.784	0.210–2.933	0	–	–	–	4	0.124	0.362	0.097–1.360
M71	9	4	0.776	1.418	0.434–4.628	2	0.741	1.504	0.323–7.001	2	1.000	1.322	0.284–6.157
M74	5	4	0.740	0.784	0.210–2.933	2	1.000	0.831	0.160–4.309	2	0.660	0.731	0.141–3.790
D4	100	58	0.607	1.094	0.776–1.542	37	0.558	0.886	0.592–1.327	21	0.140	1.448	0.884–2.371
D5	28	16	0.758	1.103	0.591–2.058	8	0.698	1.171	0.527–2.599	7	0.703	1.178	0.508–2.729
D	128	75	0.604	1.085	0.797–1.476	45	0.733	0.938	0.648–1.357	29	0.183	1.339	0.870–2.059
G	53	38	0.520	0.868	0.564–1.336	21	0.485	0.830	0.491–1.402	17	0.737	0.908	0.516–1.598
A	80	44	0.457	1.157	0.787–1.700	23	0.515	1.174	0.723–1.907	21	0.638	1.128	0.682–1.865
N9a	23	13	0.757	1.115	0.560–2.220	8	0.914	0.956	0.423–2.162	5	0.539	1.357	0.511–3.608
B4	100	77	0.150	0.791	0.575–1.089	44	0.098	0.724	0.494–1.063	33	0.527	0.873	0.573–1.330
B5	43	25	0.752	1.085	0.655–1.798	10	0.293	1.455	0.721–2.934	15	0.549	0.831	0.454–1.523
B	148	108	0.604	1.085	0.797–1.476	57	0.302	0.836	0.595–1.175	51	0.257	0.814	0.571–1.162
F1	123	82	0.652	0.933	0.689–1.263	48	0.311	0.828	0.575–1.193	34	0.746	1.070	0.711–1.611
F2	14	14	0.210	0.622	0.294–1.315	6	0.601	0.773	0.294–2.031	8	0.121	0.504	0.209–1.217
F3	8	4	0.776	1.259	0.377–4.201	4	0.508	0.663	0.198–2.218	0	–	–	–
F	154	111	0.219	0.843	0.642–1.107	63	0.125	0.773	0.555–1.075	48	0.658	0.922	0.643–1.322
R9b	14	4	0.222	2.219	0.727–6.777	0	–	–	–	4	1.000	1.026	0.335–3.145
R9	172	117	0.456	0.904	0.694–1.178	64	0.393	0.868	0.627–1.201	53	0.718	0.938	0.663–1.327
Others	56	32	0.658	1.106	0.707–1.733	16	0.577	1.177	0.664–2.087	16	0.927	1.027	0.578–1.824

*P-value was calculated by Pearson's chi-square test; Fisher's exact test was used when haplogroup occurred in less than five individuals.

[#]Haplogroup occurred in less than four individuals in the entire case or control population and those unassigned M*, N* and R* mtDNAs were pooled together. We presented these nested haplogroups according to their phylogenetic positions, e.g. D contains D4, D5, D6 and D*.

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A previous study reported that sepsis was associated with reduction of mtDNA content in circulating monocytes and lymphocytes, which influence the innate immune response to infections [33], and longitudinal increases of mtDNA copy number in blood cells was associated with survival in critically ill patients [41]. The LL type of leprosy is known to harbor a greater number of bacilli and be predisposed to low cell mediated immunity [42]. Whether the higher mtDNA copy number in LL patients negatively impacts on the immune response to *M. leprae* infection remains elusive. We speculated that the higher level of mtDNA content in LL patients might be associated with the development of lepromatous leprosy, which was accompanied by the secretion of cytokines and possibly increased oxidative stress. Indeed, a previous study by Lee et al. [43] have shown that cellular mtDNA content and mitochondrial mass would increase in response to oxidative stress. However, we must confess that this speculation could not explain the fact that we failed to observe a graded difference in mtDNA copy number from

polar tuberculoid to lepromatous leprosy, as expected from the increasing bacterial load. Because there was no statistical difference in the ages of the LL group and the other patient groups, the elevated level of mtDNA copy number in LL patients could not be simply explained by the potential age difference. Moreover, we still observed a higher level of mtDNA copy number in patients with advanced age after we excluded all LL cases. The disability in leprosy patients was directly related to host immunological reactions and early access to treatment [42]. We observed a decreasing tendency for the relative level of mtDNA copy number in patients with increasing disability grading. The exact reason for this difference awaits further study.

Some antibiotics could cause decreased cell growth, reduced mitochondrial mass, impaired respiratory complex activities and mitochondrial protein synthesis, but these inhibition effects could be reversed after stopping the antibiotic [44]. The majority of our patients who received treatment were cured more than a decade

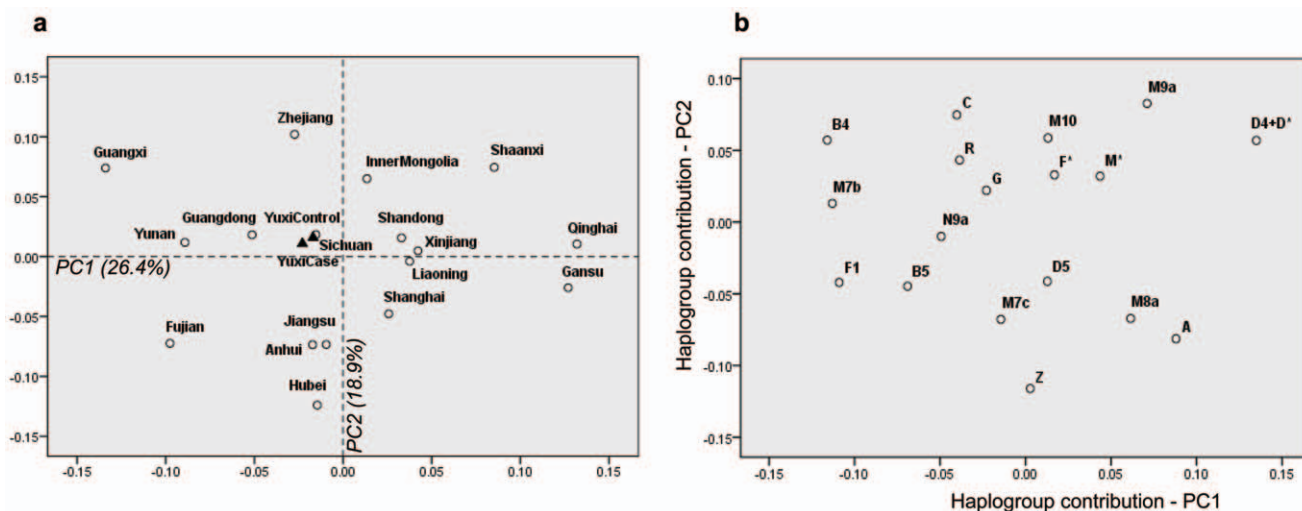


Figure 1. Principal component analysis of leprosy patient and control populations from Yuxi and reported Han Chinese populations across China. (a) PC map of Han regional populations based on mtDNA haplogroup frequencies (>1%). The patient (YuxiCase) and control (YuxiControl) populations from Yuxi were marked by triangles, whereas the reported Han Chinese populations (Zhang et al. [28] and references therein) were marked by open circles. (b) Plot of the haplogroup contribution to the first and second PCs.
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ago. We found that these patients once treated with DDS and/or RFP had similar level of mtDNA content compared with those who received MDT, suggesting that mtDNA content might not be affected by different drugs. Moreover, the mtDNA content in leprosy patients prior to any medical treatment was within the range that was observed in cured patients and control subjects (Figure 2), albeit the overall level of mtDNA content was lower in these untreated patients (Table 2) and the sample size was very small. All these observations seemed to suggest that past medical

treatments might not have an effect on mtDNA content. Because we did not collect patients who are undergoing therapy, we do not know whether there is a change of mtDNA content upon drug treatment. In addition, it would be worthwhile to compare mtDNA copy number at the time of relapse and the time of last treatment in the same patients, to test whether there are alterations of mtDNA copy number.

In summary, we found no mtDNA haplogroup that was associated with leprosy but observed an increased mtDNA copy

Table 2. Demographic information and mtDNA content in the case and control groups.

Variable	Yuxi cases (N = 296) ^a		Wenshan cases (N = 12)		Controls (N = 231)	
	No. (%)	mtDNA content (mean ± SD)	No. (%)	mtDNA content (mean ± SD)	No. (%)	mtDNA content (mean ± SD)
Sex						
Male	224 (75.7)	64.18±38.30	7 (58.3)	44.41±12.38	142 (61.5)	58.93±19.69
Female	72 (24.3)	64.94±36.91	5 (41.7)	55.28±25.52	89 (38.5)	60.31±18.72
P-value [†]		0.882		0.416		0.597
Age, year						
< mean age [*]	139 (47.0)	58.73±33.57	7 (58.3)	42.90±9.14	122 (52.8)	59.14±19.87
> mean age	157 (53.0)	69.36±40.83	5 (41.7)	57.39±26.24	109 (47.2)	59.83±18.71
P-value [†]		0.015		0.293		0.786
WHO classification[#]						
MB	163 (55.4)	66.97±37.88	5 (41.7)	41.29±12.89	–	–
PB	131 (44.6)	61.10±37.98	7 (58.3)	54.41±21.22	–	–
P-value [†]		0.187		0.250		–
Treatment						
MDT	102 (34.6)	65.51±40.53	–	–	–	–
DDS/RFP	193 (65.4)	63.73±36.64	–	–	–	–
P-value [†]		0.703		–		–

^{*}The mean age varied in each group of subjects (Mean ± SD, Yuxi case: 61.1±12.3; Wenshan case: 34.5±21.3; Control: 39.9±16.8).

[†]Student's unpaired t test (two-sided) was used to quantify the differences.

[#]Two cases from Yuxi had unclear leprosy types were excluded. All leprosy patients from Wenshan received no treatment prior to blood sample collection.

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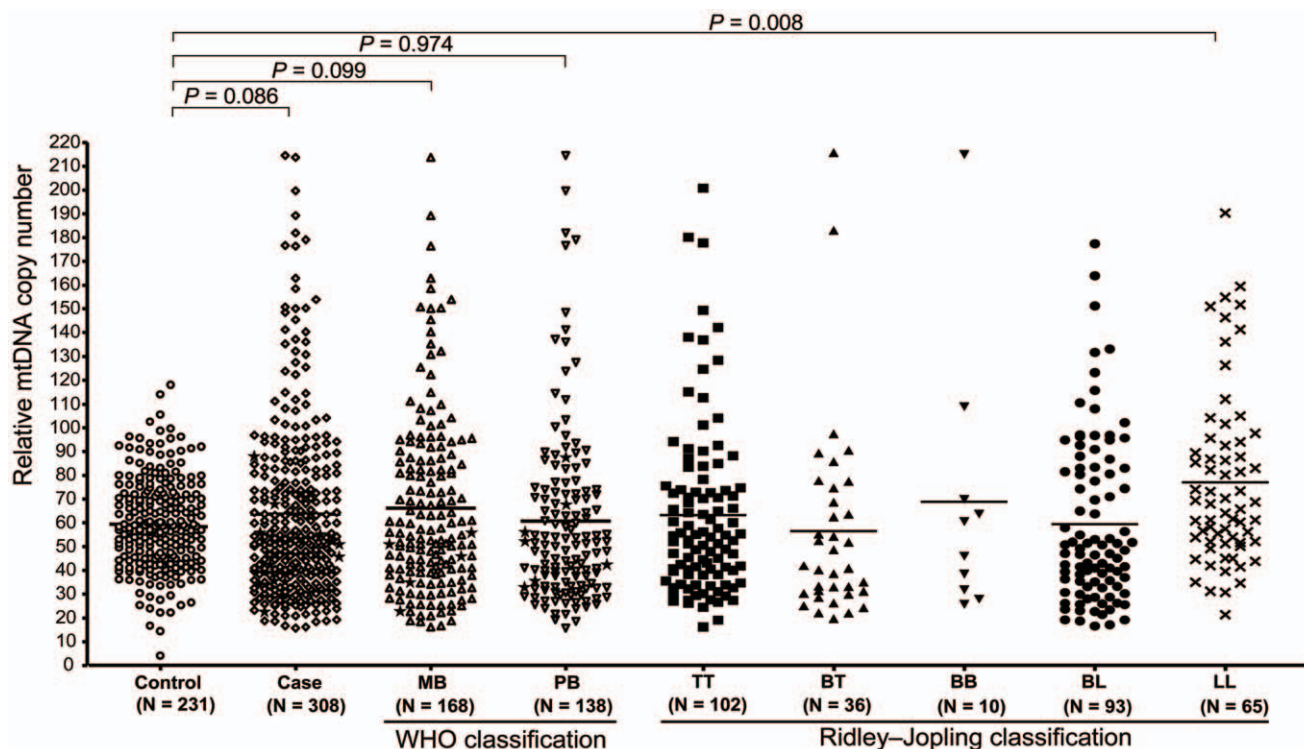


Figure 2. Comparison of the relative mtDNA copy number in leprosy patients (n=308) and matched healthy controls (n=231). Student's unpaired t test was used to quantify the statistical difference between the leprosy patient and control groups. Leprosy patients were either grouped into multibacillary leprosy (MB) and paucibacillary leprosy (PB) according to the latest WHO case definition [25] or into lepromatous (LL), borderline-lepromatous (BL), mid-borderline leprosy (BB), borderline-tuberculoid (BT), and tuberculoid (TT) based on the Ridley-Jopling classification [24]. One-way analysis of variance (ANOVA) of the mean values was used to analyze the difference of mtDNA copy number among groups (for comparison among MB, PB and control groups, $P = 0.089$; for comparison among LL, BL, BB, BT, TT and control groups, $P = 0.003$); the Dunnett's test was further used for multiple comparisons between any of the two groups. The 12 untreated leprosy samples from Wenshan were marked with stars in MB, PB and case groups, and the two patients with unclear classification were excluded from the analysis when we grouped the patients into MB and PB groups. doi:10.1371/journal.pone.0038848.g002

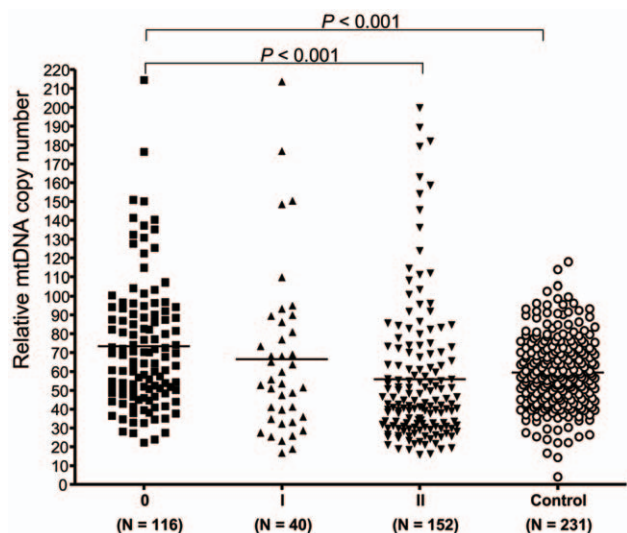


Figure 3. Relative levels of mtDNA copy number in leprosy patients with different grades of disability. One-way analysis of variance (ANOVA) of the mean values was used to analyze the difference of mtDNA copy number among groups (with a P value < 0.001) and the Dunnett's test was used for multiple comparisons between any of the two groups. doi:10.1371/journal.pone.0038848.g003

number in patients who had developed lepromatous leprosy. This observation could be compatible with the notion of a higher cellular energy supply facilitating the survival and persistence of *M. leprae in vivo*. On this point, our current result is compatible with our hypothesis that host cellular powerhouse - the mitochondria - may affect the susceptibility to *M. leprae* and the development of clinical leprosy. Functional characterization of mitochondria in patients with leprosy should be performed to independently validate our findings.

Supporting Information

Figure S1 Map showing sampling location and regional sample size. (PDF)

Table S1 mtDNA sequence variation and haplogroup classification of 534 leprosy patients and 850 normal controls from Yuxi, Yunnan, Southwest China. (XLS)

Table S2 mtDNA copy number in leprosy patients (n = 296) and controls (n = 231) with different haplogroup status. (PDF)

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Author Contributions

Conceived and designed the experiments: DW YGY. Performed the experiments: DW LYS. Analyzed the data: DW AMZ LYS YGY. Contributed reagents/materials/analysis tools: YYL XAL LLC HL. Wrote the paper: DW AMZ YGY.

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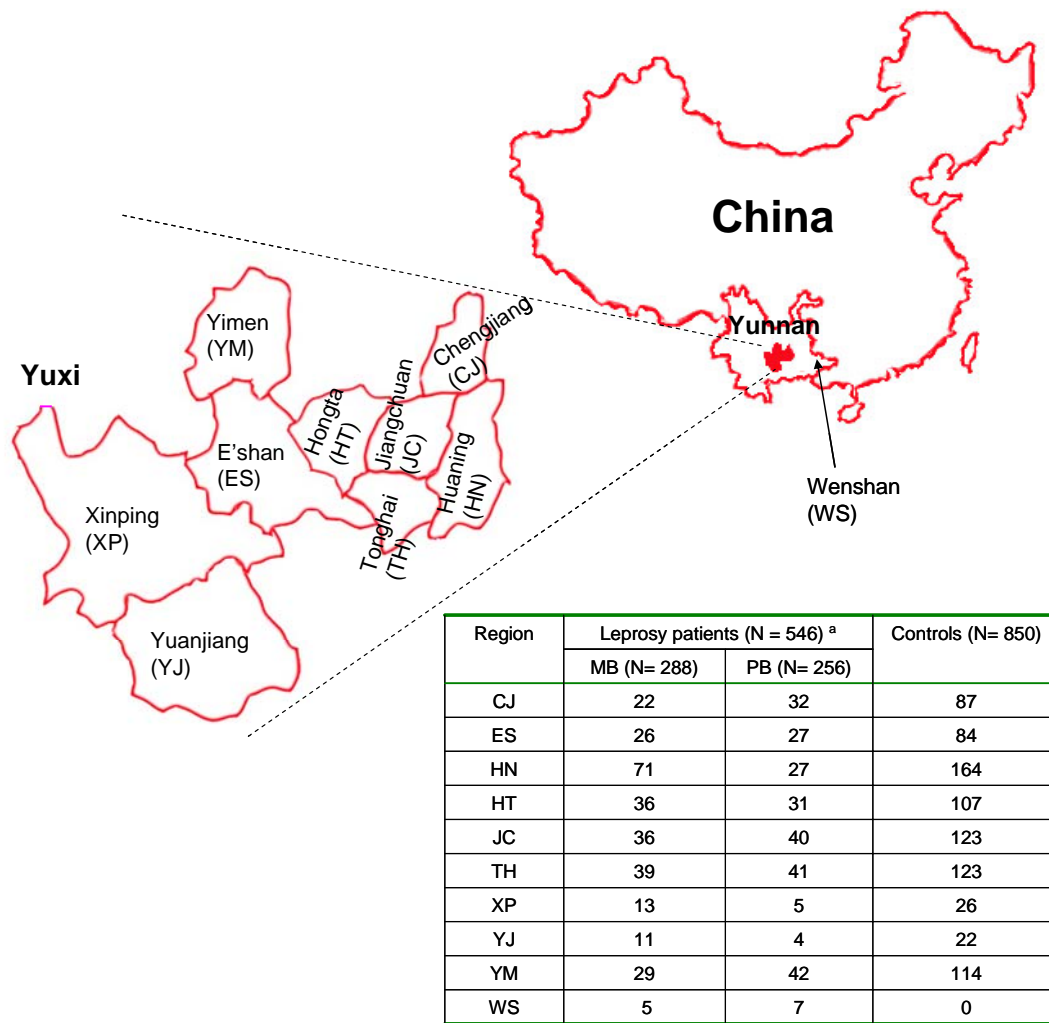


Figure S1. Map showing sampling location and regional sample size.

Table S1. mtDNA sequence variation and haplogroup classification of 534 leprosy patients and 850 normal controls from Yuxi, Yunnan, China

Sample	Haplogroup	Sequence coverage	Region I (16000+)	Region II	5176Alu I
<i>Cases</i>					
LP113	A	16038-16569/1-937	129 172 188 223 290 319 519	73 235 263 309+C 315+C 523-524d 663 750	
LP189	A	16066-16569/1-757	223 290 319 519	73 152 204 207 235 309+C 315+C 397d 523-524d 663 750	
LP474	A	16013-16569/1-886	92 223 290 311 319	64 73 146 235 263 309+C 315+C 523-524d 593 663 750	
LP083	A11	16021-16569/1-925	223 234 290 293C 311 319 519 527	73 152 194 207 235 263 309+C 315+C 523-524d 663 709 750	
LP085	A11	16025-16569/1-963	93 223 234 290 293C 319 519	73 152 235 263 309+C 315+C 523-524d 663 750	
LP115	A11	16014-16569/1-915	223 234 290 293C 319 519	73 152 235 263 309+C 315+C 385 523-524d 663 750	
LP117	A11	16038-16569/1-1039	223 234 290 293C 319 519	73 152 235 263 309+C 315+C 523-524d 663 750	
LP120	A11	16013-16569/1-1017	223 234 290 293C 319 519	73 152 235 263 309+C 315+C 523-524d 663 750	
LP254	A11	16012-16569/1-761	223 234 290 293C 319 519	73 152 235 263 309+C 315+C 523-524d 625R 663 750	
LP371	A11	16032-16569/1-997	223 234 290 293C 319 519	73 152 235 263 309+C 315+C 523-524d 663 750	
LP524	A11	16013-16569/1-993	223 234 290 293C 319 519	73 152 235 263 310+C 315+C 523-524d 663 750	
LP528	A11	16020-16569/1-1031	223 234 290 293C 319 519	73 152 235 263 310+C 315+C 523-524d 663 750	
LP068	A4	16021-16569/1-1048	223 274 290 319 362 519 527	73 143 152 235 263 315+C 523-524d 663 750	
LP136	A4	16026-16569/1-946	125 223 290 311 319 362	73 235 263 309+CC 315+C 523-524d 576 663 750	
LP163	A4	16015-16569/1-971	129 223 290 319 362	73 152 200 235 263 309+C 315+C 523-524d 663 750	
LP167	A4	16033-16569/1-799	223 290 319 362	73 151 152 200 235 263 309+C 315+C 523-524d 663 735 750	
LP180	A4	16029-16569/1-911	93 129 223 274 284 290 319 362 519	73 152 235 263 309+C 315+C 523-524d 663 750	
LP203	A4	16021-16569/1-950	172 223 290 319 362	73 152 207 235 309+C 315+C 523-524d 663 750	
LP216	A4	16037-16569/1-954	166d 223 290 319 362	73 152 200 235 263 309+CC 523-524d 663 750	
LP239	A4	16043-16569/1-932	86 150 223 290 319 362	73 152 235 263 309+C 315+C 523-524d 663 750	
LP277	A4	16034-16569/1-908	179 223 290 311 319 362 519	73 152 235 263 315+C 663 750	
LP292	A4	16085-16569/1-1000	223 274 290 319 362 527	73 152 235 263 309+C 315+C 523-524d 663 711 750	
LP304	A4	16057-16569/1-992	223 235 290 311 319 362 519	73 234 235 263 309+C 315+C 523-524d 663 750	
LP400	A4	16017-16569/1-1000	223 290 319 362	73 152 156 235 263 309+C 315+C 523-524d 663 750	
LP435	A4	16012-16569/1-971	223 290 319 362	73 151 152 200 235 260 263 315+C 523-524d 663 735 750	
LP449	A4	16026-16569/1-1002	223 274 290 319 362 527	73 152 235 263 315+C 523-524d 663 750	
LP451	A4	16076-16569/1-869	223 290 319 362	73 152 235 263 309+C 315+C 523-524d 663 750	
LP462	A4	16034-16569/1-1000	125 223 290 311 319 362	73 235 263 309+CC 315+C 523-524d 576 663 750	
LP466	A4	16020-16569/1-865	223 235 290 311 319 362 519 527	73 152 199 234 235 263 309+C 315+C 523-524d 573+CCCC 663 750	
LP477	A4	16012-16569/1-777	223 235 290 311 319 362 519	73 152 234 235 263 309+C 315+C 523-524d 663 750	
LP498	A4	16017-16569/1-954	223 274 290 319 362 519 527	73 152 235 263 309+C 315+C 523-524d 663 750	
LP504	A4	16015-16569/1-963	223 290 319 362	73 152 156 235 263 309+C 315+C 523-524d 663 750	
LP332	A4a1	16026-16569/1-842	93 223 249 290 319 362	73 152 207 235 309+CC 315+C 523-524d 663 679 750	

LP012	A4c	16022-16569/1-911	124 223 290 319 362 418	73 152 200 235 263 309+CC 315+C 523-524d 663 750
LP024	A4c	16016-16569/1-660	124 223 290 319 362	73 152 200 235 263 309+C 315+C 523-524d
LP169	A4c	16038-16569/1-857	124 223 290 319 362	73 152 200 235 263 309+C 315+C 460 523-524d 663 750
LP210	A4c	16022-16569/1-962	93 176 223 290 319 362	73 151 152 200 235 263 315+C 523-524d 663 735 750
LP409	A4c	16012-16569/1-1053	124 223 290 319 362	73 152 200 235 263 309+C 315+C 523-524d 663 750
LP418	A4c	16018-16569/1-1001	124 223 290 319 362	73 152 200 235 263 315+C 523-524d 663 750
LP442	A4c	16072-16569/1-893	124 223 290 319 362	73 152 200 235 263 309+C 315+C 523-524d 663 750
LP465	A4c	16014-16569/1-942	124 223 290 319 362	73 152 200 235 263 315+C 523-524d 663 750
LP034	A5b	16033-16569/1-872	126 223 235 290 319 519	73 235 263 315+C 523-524d 663 750
LP439	A5b	16035-16569/1-958	93 126 223 234 235 278 290 319 519	73 152 235 263 315+C 523-524d 663 750
LP058	A6	16031-16569/1-807	189 209 223 290 319 362	73 152 235 263 315+C 523-524d 654 663 750
LP027	B*	16018-16569/1-669	93 179 182C 183C 189 342	73 150 263 309+C 315+C 523-524d
LP031	B*	16014-16569/1-799	157 179 182C 183C 189 209 319 468	73 150 263 309+CCC 315+C 750
LP295	B*	16033-16569/1-1000	179 182C 183C 189 209 319	73 146 150 263 315+C 750
LP319	B*	16019-16569/1-970	157 179 182C 183C 189 209 319 468	73 150 263 309+CC 315+C 750
LP350	B*	16033-16569/1-1050	93 124 179 182C 183C 189 243 357	73 150 207 263 309+CC 315+C 750
LP480	B*	16013-16569/1-959	93 179 182C 183C 189 342	73 150 263 309+CC 315+C 523-524d 750
LP043	B4	16015-16569/1-658	108 182C 183C 189 217 362G 519	73 263 315+C 523-524d
LP056	B4	16034-16569/1-911	108 182C 183C 189 217 362G 519	73 263 309+C 315+C 523-524d 750
LP060	B4	16040-16569/1-906	129 182C 183C 189 217 519	73 263 315+C 523-524d 750
LP111	B4	16037-16569/1-1046	129 182C 183C 189 217 354A 519	73 263 309+CC 315+C 523-524d 750
LP177	B4	16025-16569/1-893	108 182C 183C 189 217 362G 519	73 263 309+C 315+C 523-524d 750
LP188	B4	16031-16569/1-975	129 182C 183C 189 217 519	73 263 309+CC 315+C 523-524d 750
LP245	B4	16070-16569/1-767	150 182C 183C 189 217 234 519	73 263 315+C 523+CA 556T 750
LP258	B4	16012-16569/1-793	129 182C 183C 189 217 519	73 189 263 309+CC 315+C 523-524d 750
LP293	B4	16042-16569/1-783	108 182C 183C 189 217 362 519	73 263 309+CC 315+C 523-524d 750
LP314	B4	16033-16569/1-971	108 182C 183C 189 217 362G 519	73 146 214 263 309+CC 315+C 523-524d 750
LP347	B4	16044-16569/1-959	129 182C 183C 189 217 362	73 195 263 309+CC 315+C 523-524d 750
LP445	B4	16036-16569/1-962	183C 189 362 519	73 263 315+C 316 750 827
LP468	B4	16012-16569/1-970	129 182C 183C 189 217 278 519	73 263 309+CC 315+C 523-524d 750
LP015	B4a1a	16015-16569/1-661	129 182C 183C 189 217 261	73 146 263 309+CCC 315+C 523-524d
LP079	B4a1c	16011-16569/1-860	93 182C 183C 189 193+C 217 261 299 519	73 150h 263 309+C 315+C 523-524d 709 750
LP103	B4a1c	16035-16569/1-965	93 182C 183C 188 189 193+C 214 217 261 519	73 146 263 281 309+C 315+C 523-524d 709 750
LP222	B4a1c	16015-16569/1-970	182C 183C 189 217 261 299 519	73 193 263 315+C 523-524d 709 750
LP241	B4a1c	16030-16569/1-965	93 182C 183C 189 217 261 519	73 143 146 263 309+CC 315+C 523-524d 533 709 750
LP276	B4a1c	16082-16569/1-870	93 182C 183C 189 217 261 519	73 146 152 263 309+CC 315+C 523-524d 709 750

LP318	B4a1c	16029-16569/1-904	167 182C 183C 189 217 261 519	73 146 227T 263 309+C 315+C 523-524d 709 750
LP341	B4a1c	16025-16569/1-894	167 182C 183C 189 217 261 519	73 146 263 309+C 315+C 523-524d 709 750
LP351	B4a1c	16029-16569/1-1099	182C 183C 189 217 261 299 519	73 193 263 315+C 523-524d 709 750
LP357	B4a1c	16033-16569/1-1042	92 182C 183C 189 217 261 299 519	73 193 263 309+CC 315+C 523-524d 709 750
LP531	B4a1c	16017-16569/1-1042	93 182C 183C 189 217 261 519	73 146 263 309+CC 315+C 523-524d 533 709 750
LP066	B4a'g	16015-16569/1-954	182C 183C 189 217 240 261	73 263 309+C 315+C 523-524d 750
LP084	B4a'g	16016-16569/1-870	129 182C 183C 189 217 261 354	73 263 309+CC 315+C 523-524d 750
LP090	B4a'g	16017-16569/1-1017	182C 183C 189 217 261	73 263 309+C 315+C 523-524d 750
LP130	B4a'g	16031-16569/1-1000	182C 183C 189 217 240 261 357	73 263 309+CC 315+C 523-524d 750
LP149	B4a'g	16045-16569/1-970	182C 183C 189 217 240 261	73 263 309+CC 315+C 523-524d 750
LP152	B4a'g	16041-16569/1-943	182C 183C 189 217 261	73 263 309+CC 315+C 750
LP166	B4a'g	16018-16569/1-970	182C 183C 189 217 240 261	73 263 309+CC 315+C 523-524d 750
LP182	B4a'g	16023-16569/1-804	182C 183C 189 217 240 261	73 263 309+CC 315+C 523-524d 750
LP186	B4a'g	16032-16569/1-971	182C 183C 189 217 240 261	73 263 315+C 523-524d 750
LP220	B4a'g	16033-16569/1-993	92 182C 183C 189 217 261 399 519	73 200 263 309+CC 315+C 523-524d 750
LP228	B4a'g	16033-16569/1-931	84 182C 183C 189 217 261 362 399 519	73 189 263 309+C 315+C 523-524d 750
LP242	B4a'g	16059-16569/1-832	182C 183 189 217 261 519	73 263 309+C 315+C 523-524d 750
LP255	B4a'g	16018-16569/1-774	93 182C 183C 189 217 261 357 519	73 263 309+CCC 315+C 523-524d 750
LP263	B4a'g	16011-16569/1-902	182C 183C 189 217 240 261	73 263 309+C 315+C 523-524d 750
LP269	B4a'g	16043-16569/1-837	182C 183C 189 217 240 261	73 263 309+C 315+C 523-524d 750
LP326	B4a'g	16026-16569/1-908	93 182C 183d 189 217 261	73 204 263 315+C 750
LP363	B4a'g	16016-16569/1-886	93 182C 183C 189 217 256 261 326 360 519	73 263 310 315+C 523-524d 750
LP378	B4a'g	16032-16569/1-1017	93Y 182C 183C 189 217 261	73 263 309+CC 315+C 486 750
LP392	B4a'g	16019-16569/1-965	84 182C 183C 189 217 261 362 399 519	73 189 263 309+C 315+C 523-524d 750
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LP507	B4a'g	16033-16569/1-959	92 182C 183C 189 217 261 399 519	73 200 263 309+C 315+C 523-524d 750
LP306	B4b	16041-16569/1-1125	183C 189 214 217 264 519	73 263 309+C 315+C 499 750 827
LP131	B4b1	16017-16569/1-970	93 136 182C 183C 189 217 298 311 519	73 150 152 263 315+C 357 499 750 827
LP175	B4b1a	16036-16569/1-871	136 183C 189 217 519	73 207 263 315+C 499 750 827
LP253	B4b1a	16041-16569/1-949	136 182C 183C 189 217 519	73 207 263 309+CC 315+C 499 750 827
LP403	B4b1a	16031-16569/1-991	136 182C 183C 189 217 519	73 152 207 263 309+CC 315+C 499 523-524d 750 827
LP179	B4b1b'c	16031-16569/1-894	136 183C 189 217 218 519	73 263 309+C 315+C 499 750 827
LP321	B4b'd	16018-16569/1-922	183C 189 215 217 234 519	73 152 263 309+C 315+C 750 827
LP349	B4b'd	16039-16569/1-888	182C 183C 189 217 519	73 200 263 309+C 315+C 513+CA 750 827
LP367	B4b'd	16049-16569/1-1008	183C 189 217 234 519	73 152 263 309+C 315+C 523-524d 750 827

LP387	B4b'd'e	16032-16569/1-959	183C 189 217 234 519	73 263 309+CC 315+C 750 827
LP157	B4c1	16024-16569/1-971	182C 183C 189 217 311 362 519	73 263 315+C 523-524d 750
LP303	B4c1	16025-16569/1-961	183C 189 217 311 519	73 150 195 214 263 279 309+CC 315+C 750
LP355	B4c1	16027-16569/1-1002	182C 183C 189 217 311 362 519	73 263 315+C 523-524d 750
LP036	B4c1b	16017-16569/1-669	140 182C 183C 189 193 217 242A 274 335 519	73 146 150 263 309+C 315+C 523-524d
LP124	B4c1b	16016-16569/1-965	136 140 183C 189 217 249 274 291 335 519	73 150 263 315+C 709 750
LP127	B4c1b	16018-16569/1-993	86 140 183C 189 193+C 217 274 335 519	73 150 263 309+C 315+C 709 750
LP132	B4c1b	16014-16569/1-963	129 140 145 166 183C 189 217 274 335 519	73 150 200 263 282 309+CCC 315+C 709 750
LP007	B4c1b2	16025-16569/1-959	140 183C 189 217 274 289 316 335 356 483 519	73 146 150 263 309+C 315+C 709 750
LP279	B4c1b2	16018-16569/1-1037	140 182C 183C 189 217 274 311 335 519	73 146 150 263 309+C 315+C 709 750
LP515	B4c1b2	16018-16569/1-834	140 183C 189 217 274 316 335 362 483 519	73 146 150 263 309+CC 315+C 709 750
LP059	B4c2	16083-16569/1-834	147 183C 184A 189 217 235 519	73 263 309+C 315+C 523-524d 750
LP092	B4c2	16015-16569/1-961	147 182C 184A 189 193d 217 519	73 263 309+C 315+C 750
LP105	B4c2	16014-16569/1-908	147 183C 184A 189 217 235 519	73 263 309+C 315+C 750
LP408	B4c2	16023-16569/1-832	147 183C 184A 189 217 235 519	73 263 309+C 315+C 523-524d 750
LP446	B4c2	16022-16569/1-947	147 169 183C 184A 189 217 235 519	73 263 309+CC 315+C 523-524d 750
LP486	B4c2	16018-16569/1-969	147 183C 184A 189 217 235 519	73 194 263 309+C 315+C 522 523d 750
LP055	B4e	16038-16569/1-920	169 182C 183C 189 217 223 519	73 146 185 189 195 263 309+CC 315+C 513 750 827
LP078	B4e	16017-16569/1-842	169 182C 183C 189 217 223 519	73 146 185 189 195 263 309+CC 315+C 513 750 827
LP035	B4g	16017-16569/1-869	173 181C 182C 183C 189 213 217 245 261 289 292 301 519	61A 62 73 263 310 316C 319 523-524d 750
LP129	B4g	16035-16569/1-1016	86 181C 182C 183C 189 213 217 261 292 519	61A 62 73 263 309+CC 315+C 523-524d 750
LP140	B4g	16016-16569/1-799	181C 182C 183C 189 213 217 261 292 519	73 263 309 310 523-524d 750
LP032	B5a	16021-16569/1-909	140 183C 189 193+C 220 266A 519	73 210 263 309+C 315+C 523-524d 709 750
LP049	B5a	16039-16569/1-804	140 183C 189 266A 519	73 210 263 309+C 315+C 523-524d 709 750
LP052	B5a	16024-16569/1-954	140 183C 189 266A 267 519	73 152 210 263 309+C 315+C 523-524d 709 750
LP106	B5a	16060-16569/1-954	140 183C 189 266A 519	73 210 263 309+CC 315+C 523-524d 709 750
LP153	B5a	16025-16569/1-1000	140 183C 189 266A 519	73 210 263 309+CC 315+C 523-524d 709 750
LP192	B5a	16026-16569/1-930	140 182C 183C 189 266A 519	73 210 263 315+C 523-524d 593 709 750
LP302	B5a	16016-16569/1-1091	140 183C 189 262 266A	64 73 210 263 315+C 523-524d 593 709 750
LP327	B5a	16021-16569/1-962	140 183C 189 234 266A 519	73 210 263 523-524d 709 750
LP368	B5a	16065-16569/1-1036	140 182C 183C 189 242A 266A 519	73 210 263 315+C 523-524d 593 709 750
LP379	B5a	16044-16569/1-1056	140 183C 189 266A 519	73 210 263 309+C 315+C 523-524d 709 750
LP396	B5a	16051-16569/1-1056	140 183C 189 266A	73 210 263 309+C 315+C 523-524d 709 750
LP417	B5a	16050-16569/1-860	140 183C 189 205 266A 519	73 210 263 309+CC 315+C 523-524d 709 750
LP424	B5a	16016-16569/1-1050	140 183C 189 266A 362 519	73 150 210 263 315+C 455+T 523-524d 709 750
LP464	B5a	16013-16569/1-971	140 183C 189 242 266A 519	73 146 210 263 309+C 315+C 523-524d 709 750

LP469	B5a	16024-16569/1-965	140 183C 189 266A 519	73 210 263 310 315+C 523-524d 709 750	
LP489	B5a	16083-16569/1-853	140 182C 183C 189 261 266A 344 519	73 152 210 263 309+CC 315+C 523-524d 709 750	
LP511	B5a	16017-16569/1-954	140 183C 189 193+C 242 266A 519	73 146 210 263 309+C 315+C 523-524d 709 750	
LP512	B5a	16020-16569/1-931	140 183C 189 266A 519	73 210 263 315+C 523-524d 709 750	
LP063	B5a2	16024-16569/1-895	140 187 189 256 266G 519	73 93 210 263 309+C 315+C 523-524d 709 750	
LP019	B5b	16015-16569/1-657	93 111 140 183C 189 234 242 243 463 519	73 103 131 263 309+C 315+C 523-524d	
LP072	B5b	16019-16569/1-936	140 182C 183C 189 243 519	73 103 185 263 309+CC 315+C 523-524d 709 750	
LP154	B5b	16036-16569/1-945	140 182C 183C 189 243 519	73 103 185 263 309+CC 315+C 523-524d 709 750	
LP272	B5b	16084-16569/1-914	140 183C 189 193+C 243 342 355 519	73 103 263 309+C 315+C 523-524d 709 750	
LP365	B5b	16033-16569/1-945	140 183C 189 243 311 519	73 103 204 263 309+C 315+C 523-524d 709 750	
LP376	B5b	16044-16569/1-806	140 183C 189 243 311 519	73 103 204 263 309+C 315+C 523-524d 709 750	
LP038	C	16017-16569/1-659	183C 189 223 261 298 327 519	73 195 249d 263 309+C 315+C 489	
LP039	C	16013-16569/1-659	189 223 298 327 519	73 249d 263 309+C 315+C 489	
LP048	C	16020-16569/1-971	93 223 298 327 519	73 146 249d 263 315+C 449 489 750	
LP077	C	16095-16569/1-913	223 298 327 362 519	73 249d 263 315+C 489 750	
LP122	C	16033-16569/1-1002	189 223 298 327 519	73 249d 263 309+CC 315+C 489 750	
LP161	C	16023-16569/1-961	183C 189 223 261 298 327 519	73 249d 263 309+CC 315+C 489 750	
LP174	C	16032-16569/1-986	223 298 327 519	73 249d 263 309+C 315+C 460 489 750	
LP195	C	16029-16569/1-954	298 327 519	73 249d 263 309+CC 315+C 489 750	
LP205	C	16038-16569/1-1105	51 223 298 327 519	73 249d 263 315+C 489 750	
LP229	C	16089-16569/1-971	223 298 327 519	73 146 153 249d 263 315+C 489 750	
LP267	C	16009-16569/1-799	189 223 298 327	73 249d 263 309+C 315+C 489 523-524d 750	
LP333	C	16019-16569/1-814	86 223 242 256 298 327 390 519	73 146 249d 263 315+C 489 750	
LP345	C	16072-16569/1-835	187 223 298 327 519	73 249d 263 309+C 315+C 489 750	
LP382	C	16041-16569/1-1039	187 223 298 327 519	73 249d 263 309+C 315+C 489 750	
LP413	C	16032-16569/1-891	93 172 223 298 327 519	73 249d 263 315+C 489 750	
LP423	C	16016-16569/1-886	223 298 327 519	73 249d 263 309+C 315+C 489 750	
LP425	C	16065-16569/1-795	223 298 327 519	73 146 249d 263 309+C 315+C 489 750	
LP470	C	16014-16569/1-1105	183C 189 223 261 274 298 327 519	73 249d 263 309+CC 315+C 489 750	
LP233	C4a4	16054-16569/1-1015	223 298 327 354 357 519	47 73 249d 263 309+C 315+C 489 523-524d 750	
LP009	D4	16014-16569/1-903	223 356 362	73 263 309+C 315+C 489 523-524d 750	-
LP010	D4	16019-16569/1-787	126 174 223 343 362	63 73 263 315+C 489 750	-
LP016	D4	16016-16569/1-870	86 223 271 362	73 263 309+C 315+C 489 750	-
LP017	D4	16043-16569/1-657	172 223 362	73 209 263 315+C 489	-
LP046	D4	16019-16569/1-910	93 201 223 362 519	73 152 263 309+C 315+C 489 750	-
LP087	D4	16022-16569/1-954	86 223 264 271 362	73 263 309+C 315+C 489 750	-

LP093	D4	16024-16569/1-846	223 362 519	73 263 315+C 489 523-524d 750	-
LP095	D4	16027-16569/1-834	223 362 519	41 73 194 263 315+C 489 523-524d 750	-
LP104	D4	16014-16569/1-1039	223 362 519	73 263 315+C 489 523-524d 750	-
LP109	D4	16032-16569/1-874	223 362 519	73 152 173 199 263 279 315+C 489 750 813	-
LP125	D4	16013-16569/1-964	201 223 362	73 152 263 309+C 315+C 489 750	-
LP128	D4	16013-16569/1-1042	223 362 519	73 263 309+C 315+C 489 750	-
LP133	D4	16014-16569/1-871	140 223 362 519	73 152 263 298 315+C 489 750	-
LP156	D4	16024-16569/1-1039	223 362	73 94 214 263 309+C 315+C 489 750	-
LP178	D4	16021-16569/1-907	126 174 223 343 362	73 263 309+C 315+C 489 750	-
LP183	D4	16037-16569/1-1050	92 223 270 362	73 263 309+C 315+C 489 750	-
LP190	D4	16013-16569/1-758	183C 189 223 274 362 519	73 263 298 310 316 489 750	-
LP200	D4	16027-16569/1-954	223 362 519	73 152 173 199 263 279 315+C 489 750 813	-
LP207	D4	16043-16569/1-959	111 189 223 287 291A 362 519	73 263 309+C 315+C 489 523-524d 750	-
LP221	D4	16023-16569/1-895	174 223 254 362	73 263 309+C 315+C 489 523-524d 750	-
LP231	D4	16066-16569/1-798	172 362 519	73 194 263 315+C 489 523-524d 750	-
LP248	D4	16033-16569/1-919	189 223 278 362	73 94 263 315+C 489 750	-
LP265	D4	16008-16569/1-899	223 256 311 362 519	73 200 263 315+C 489 750	-
LP301	D4	16032-16569/1-1000	223 362 519	73 152 199 263 279 315+C 489 750 813	-
LP309	D4	16043-16569/1-1000	223 356 362	73 263 309+C 315+C 489 750	-
LP312	D4	16018-16569/1-922	92 223 362	73 94 263 309+C 315+C 489 517 750	-
LP313	D4	16022-16569/1-962	86 223 271 362	73 263 309+C 315+C 489 750	-
LP335	D4	16088-16569/1-751	223 362 519	73 194 263 315+C 489 523-524d 750	-
LP339	D4	16030-16569/1-840	86 362	73 94 263 315+C 489 750	-
LP342	D4	16091-16569/1-996	223 286 362	73 150 263 309+C 315+C 489 750	-
LP375	D4	16098-16569/1-943	126 223 274 362	73 152 263 309+CC 315+C 489 750	-
LP384	D4	16035-16569/1-779	126 172 189 223 319 362	73 185 195 263 315+C 489 523-524d 750	-
LP393	D4	16032-16569/1-1017	126 174 223 343 362	73 263 315+C 489 750	-
LP405	D4	16026-16569/1-962	86 223 271 362	73 263 309+C 315+C 376 489 750	-
LP437	D4	16013-16569/1-996	86 223 274 362 519	73 263 309+C 315+C 489 750	-
LP440	D4	16040-16569/1-773	86 223 362	73 263 315+C 489 750	-
LP457	D4	16031-16569/1-897	93 223 362	73 152 263 309+C 315+C 489 750	-
LP471	D4	16020-16569/1-1031	223 311 362	73 94 214 263 315+C 489 750	-
LP493	D4	16014-16569/1-881	189 192 223 316 362	73 199 263 315+C 489 350	-
LP501	D4	16014-16569/1-959	86 223 271 362	73 236 309+C 315+C 489 750	-
LP502	D4	16032-16569/1-1017	86 223 271 362	73 236 309+C 315+C 489 750	-
LP510	D4	16016-16569/1-814	111 223 362	73 200 263 315+C 489 523-524+AC 750 769	-

LP514	D4	16012-16569/1-847	184 223 311 362 526	73 263 315+C 338 489 750	-
LP521	D4	16020-16569/1-1055	111 223 362	73 200 263 315+C 489 523+CA 750 769	-
LP208	D4a	16018-16569/1-971	129 223 362	73 152 263 309+C 315+C 489 750	-
LP215	D4a	16042-16569/1-923	129 223 362	73 152 263 309+C 315+C 489 750	-
LP288	D4a	16032-16569/1-1017	129 223 362 519	73 152 263 309+C 315+C 489 750	-
LP289	D4a	16018-16569/1-959	129 223 362 390	73 151 152 263 309+C 315+C 489 518 750	-
LP329	D4a	16016-16569/1-948	129 209 223 362 519	73 152 263 309+C 315+C 489 750	-
LP021	D4a1e	16022-16569/1-799	129 223 256 362 291d 519	73 152 263 291d 309+CC 310+C 489 750	-
LP050	D4b2b	16022-16569/1-1002	223 362 519	73 194 263 315+C 489 523-524d 750	-
LP214	D4b2b	16022-16569/1-969	223 362 519	41 73 194 263 315+C 489 523-524d 750	-
LP196	D4g2a	16052-16569/1-965	129 223 239 274 362	73 263 298 309+C 315+C 489 709 750	-
LP197	D4g2a	16038-16569/1-971	129 223 239 274 362	73 263 298 309+C 315+C 489 709 750	-
LP107	D4i	16056-16569/1-892	223 294 362	73 204 263 309+C 315+C 489 750	-
LP094	D4j3	16045-16569/1-769	184 189 223 311 362	73 263 309+C 315+C 338 489 750	-
LP037	D4k	16013-16569/1-1042	192 223	73 195 263 309+C 315+C 489 750	-
LP361	D4k	16043-16569/1-870	189 192 198 223	73 195 263 315+C 489 750	-
LP145	D5	16044-16569/1-906	92 164 182C 183C 189 223 362	73 150 263 315+C 489 523-524d 750 752	-
LP219	D5	16039-16569/1-771	92 164 182C 183 189 223 266 362	73 150 263 309+C 315+C 489 523-524d 750 752	-
LP110	D5a	16017-16569/1-898	182C 183C 189 223 360 362	73 150 309+CC 315+C 489 750 752	-
LP428	D5a	16032-16569/1-963	164 182C 183C 189 223 266 311 362	73 150 263 309+C 315+C 489 523-524d 750 752	-
LP455	D5a	16040-16569/1-914	172 182C 183C 189 223 362	73 150 263 309+CC 315+C 489 523-524d 750 752	-
LP045	D5a2a	16013-16569/1-870	92 111 129 164 182C 183C 189 223 266 362	73 150 153 199 263 315+C 489 523-524d 750 752	-
LP283	D5a2a	16013-16569/1-965	92 164 172 182C 183C 189 223 266 362	73 150 263 315+C 489 523-524d 750 752	-
LP429	D5a2a	16013-16569/1-806	92 164 172 182C 183C 189 223 243 266 362	73 150 263 309+C 315+C 489 523-524d 750 752	-
LP506	D5a2a	16019-16569/1-956	92 164 172 182C 183C 189 223 266 362	73 146 150 263 309+CC 315+C 489 523-524d 750 752	-
LP033	D5a3	16008-16569/1-887	182C 183C 189 223 311 360 362	73 93 150 204 207 263 309+C 315+C 489 750 752	-
LP484	D5a3	16030-16569/1-921	93 111 182C 183C 189 193+C 223 360 362	73 150 263 308-309d 315+C 489 523-524d 727Y 750 752	-
LP523	D5a3	16015-16569/1-1042	93 111 182C 183C 189 223 360 362 519	73 150 263 309+CC 315+C 489 523-524d 750 752	-
LP472	D5b	16021-16569/1-902	136 189 190 193+C 223 234 311 362	73 150 151 152 263 310d 489 750	-
LP108	D5b	16033-16569/1-885	183C 189 217 223 319 362 519	73 150 189 263 315+C 456 489 681 750	-
LP243	D5b	16033-16569/1-829	183C 189 223 357 362 519	73 146 150 263 309+CC 315+C 456 489 520A 681 750	-
LP415	D5b	16014-16569/1-870	182C 183C 189 223 362	73 150 152 263 309+CC 315+C 456 457 489 681 750	-
LP025	D6c	16015-16569/1-660	183C 189 223 311 362	73 152 204 263 315+C 489 523-524d	-
LP018	F*	16013-16569/1-870	92A 95 291 304	73 249d 263 315+C 523-524d 750	-
LP054	F*	16015-16569/1-1016	185 266 291 304 519	73 249d 263 315+C 747 750 1005	-
LP096	F*	16035-16569/1-954	304	73 249d 263 309+C 315+C 750	-

LP212	F*	16017-16569/1-947	172 224 291Y 304 519	73 249d 263 315+C 523-524d 750
LP230	F*	16018-16569/1-1075	172 304 362 519	73 214 249d 263 309+C 315+C 523-524d 750
LP271	F*	16016-16569/1-914	86 304	73 195 249d 263 315+C 524+AC 606 750
LP286	F*	16052-16569/1-1114	86 304 355 519	73 199 249d 263 315+C 750 1005
LP391	F*	16028-16569/1-1000	172 209 304 519	73 200 249d 263 309+C 315+C 523-524d 750
LP410	F*	16029-16569/1-942	86 167 304 318 519	73 249d 263 315+C 750
LP494	F*	16018-16569/1-1039	183C 193+C 274 304 519	73 208 249d 263 309+CCC 315+C 523-524d 709 750 929 930
LP057	F1	16017-16569/1-913	183C 189 304 519	73 249d 263 309+C 315+C 494A 523-524d 750
LP065	F1	16011-16569/1-808	183C 189 243 304 519	73 185C 249d 263 309+C 315+C 750
LP089	F1	16016-16569/1-963	146 182C 183C 189 304 519	73 249d 263 309+C 315+C 523-524d 750
LP097	F1	16025-16569/1-1000	183C 189 304 311	73 249d 263 315+C 523-524d 750
LP102	F1	16032-16569/1-957	183C 189 304 519	73 249d 263 309+C 315+C 523-524d 745+T 750
LP126	F1	16018-16569/1-999	183C 189 243 304 519	73 185C 249d 263 309+CC 315+C 750
LP194	F1	16034-16569/1-1017	172 189 304 519	73 146 152 249d 263 315+C 486 523-524d 750
LP198	F1	16026-16569/1-993	183C 189 243 304 519	73 185C 249d 263 309+C 315+C 750
LP261	F1	16012-16569/1-921	183C 189 243 304 519	73 249d 263 309+C 315+C 523-524d 750
LP280	F1	16057-16569/1-999	183C 189 304 519	73 249d 263 309+CC 315+C 523-524d 750
LP291	F1	16017-16569/1-963	189 304 519	73 146 217 249d 263 309+C 315+C 369 523-524d 750
LP315	F1	16026-16569/1-850	183C 189 304 519	73 249d 263 309+CC 315+C 523-524d 750
LP354	F1	16075-16569/1-870	182M 183C 189 304 519	73 249d 263 309+C 315+C 523-524d 750
LP381	F1	16023-16569/1-1099	182C 183C 189 304 355 519	73 249d 263 315+C 750 1005
LP406	F1	16022-16569/1-1039	183C 189 304 519	73 249d 263 309+CC 315+C 523-524d 750
LP416	F1	16015-16569/1-949	93 183C 189 243 304 519	73 249d 263 309+CC 315+C 523-524d 750
LP069	F1a	16016-16569/1-1000	129 172 304 519	73 249d 263 315+C 523-524d 750
LP081	F1a	16099-16569/1-908	129 172 304 519	73 249d 263 309+C 315+C 523-524d 750
LP114	F1a	16041-16569/1-1056	86 129 172 304 519	73 249d 263 315+C 523-524d 750
LP139	F1a	16032-16569/1-1017	129 172 304 519	73 204 249d 263 309+C 315+C 523-524d 750
LP193	F1a	16017-16569/1-959	129 172 304 519	73 249d 263 309+C 315+C 523-524d 750
LP232	F1a	16082-16569/1-944	129 172 304 519	73 195 249d 263 309+C 315+C 523-524d 750
LP264	F1a	16007-16569/1-850	129 172 304 519	73 249d 263 315+C 523-524d 750
LP330	F1a	16014-16569/1-946	172 189 304 519	73 146 152 249d 263 315+C 486 523-524d 750
LP421	F1a	16019-16569/1-921	129 172 304 519	73 249d 263 309+C 315+C 523-524d 750
LP441	F1a	16014-16569/1-955	129 172 304 519	73 249d 263 309+C 315+C 523-524d 750
LP450	F1a	16033-16569/1-914	129 172 304 519	73 249d 263 315+C 523-524d 750
LP456	F1a	16025-16569/1-836	129 172 304 519	73 249d 263 315+C 523-524d 750
LP491	F1a	16014-16569/1-1028	129 172 304 519	73 249d 263 309+C 315+C 523-524d 750

LP500	F1a	16022-16569/1-954	129 172 304 519	73 249d 263 315+C 523-524d 750
LP526	F1a	16012-16569/1-1052	86 129 172 304 519	73 152 249d 263 315+C 523-524d 750
LP100	F1a1	16035-16569/1-954	93 129 162 172 304 399 519	73 249d 263 309+C 315+C 523-524d 750
LP162	F1a1	16014-16569/1-808	129 162 172 304 519	73 249d 263 309+C 315+C 466G 523-524d 548 750
LP168	F1a1	16027-16569/1-971	93 129 162 168 172 304 399 519	73 249d 263 309+C 315+C 523-524d 750
LP181	F1a1	16028-16569/1-822	129 162 172 304 311 519	73 152 249d 263 315+C 523-524d 750
LP252	F1a1	16044-16569/1-870	129 162 172 304 474 519	73 249d 263 309+C 315+C 523-524d 548 549 750
LP257	F1a1	16012-16569/1-833	129 162 172 304 497 506 519	73 249d 263 309+C 315+C 523-524d 750
LP281	F1a1	16032-16569/1-898	129 162 172 304	73 146 249d 263 315+C 523-524d 548 750
LP316	F1a1	16022-16569/1-895	129 162 172 209 243 304 519	73 248 249d 263 315+C 523-524d 750
LP344	F1a1	16067-16569/1-954	129 162 172 304 519	73 249d 263 315+C 466G 523-524d 548 750
LP397	F1a1	16017-16569/1-1055	129 162 172 304 519	73 249d 263 309+C 315+C
LP485	F1a1	16016-16569/1-959	129 162 172 304 399 519	73 249d 263 315+CCC 523-524d 750
LP144	F1a1a	16025-16569/1-759	108 129 162 172 293 304 519	73 249d 263 315+C 523-524d 750
LP165	F1a1a	16043-16569/1-1040	108 129 162 172 234 304 519	73 150 195 249d 263 309+C 315+C 523-524d 750 930
LP284	F1a1a	16033-16569/1-993	108 129 162 172 304 519	73 150 207 249d 263 309+C 315+C 523-524d 750
LP299	F1a1a	16025-16569/1-954	108 129 162 172 304 519	73 150 195 249d 263 309+C 315+C 750 930
LP300	F1a1a	16028-16569/1-953	108 129 162 172 256 265C 304 519	73 249d 263 309+CC 315+C 523-524d 750
LP320	F1a1a	16016-16569/1-961	108 129 162 172 261 304 519	73 249d 263 309+C 315+C 523-524d 750
LP323	F1a1a	16019-16569/1-970	108 129 162 172 304 519	73 150 195 249d 263 309+C 315+C 750 930
LP348	F1a1a	16052-16569/1-953	108 129 162 172 304 519	73 150 249d 263 309+C 315+C 523-524d 750 930
LP419	F1a1a	16058-16569/1-835	108 129 162 172 304 519	73 150 207 249d 263 309+C 315+C 523-524d 750
LP525	F1a1a	16024-16569/1-1046	108 129 162 172 304 354 519	73 249d 263 309+C 315+C 523-524d 750
LP022	F1a3	16015-16569/1-942	129 172 304 311 519	73 249d 263 315+C 523-524d 750
LP151	F1a3	16024-16569/1-1016	129 172 304 311 519	73 249d 263 309+C 315+C 523-524d 750
LP307	F1a3	16041-16569/1-964	129 172 265 304 311 519	73 249d 263 309+C 315+C 523-524d 750
LP311	F1a4	16034-16569/1-859	129 172 294 304 362 519	73 152 249d 263 309+C 315+C 521-524d 574C 573+CCCC 750
LP487	F1a4	16032-16569/1-999	129 172 304 311 362 519	73 152 249d 263 309+C 315+C 520-523d 750
LP071	F1a'c	16019-16569/1-859	111 129 304 519	73 152 234 249d 263 309+C 315+C 523-524d 750
LP116	F1a'c	16077-16569/1-1000	111 129 304 519	73 152 234 249d 263 309+C 315+C 523-524d 750
LP158	F1a'c	16024-16569/1-964	129 183C 189 304 519	73 249d 263 309+CC 315+C 523-524d 750
LP201	F1a'c	16038-16569/1-1000	93 129 183C 189 304 519	73 249d 263 309+C 315+C 523-524d 750
LP224	F1a'c	16017-16569/1-758	111 129 304 519	73 152 234 249d 263 309+C 315+C 523-524d 750
LP266	F1a'c	16009-16569/1-831	111 129 304 519	73 152 234 249d 263 309+C 315+C 523-524d 750
LP343	F1a'c	16036-16569/1-958	111 266 304 519	73 152 249d 263 315+C 523-524d 750
LP380	F1a'c	16014-16569/1-1050	86 129 304 519	73 152 249d 263 315+C 523-524d 709 750

LP432	F1a'c	16009-16569/1-1045	111 129 266 304 311 519	73 152 249d 263 315+C 523-524d 750
LP434	F1a'c	16012-16569/1-1016	111 129 266 304 311 519	73 152 249d 263 315+C 523-524d 750
LP443	F1a'c	16018-16569/1-923	111 129 266 304 311 519	73 152 249d 263 315+C 523-524d 750
LP444	F1a'c	16020-16569/1-951	111 129 266 304 519	73 152 249d 263 315+C 523-524d 750
LP473	F1a'c	16016-16569/1-996	111 129 304 519	73 152 234 249d 263 309+C 315+C 523-524d 750
LP481	F1a'c	16022-16569/1-733	111 129 266 304 311 519	73 152 249d 263 315+C 523-524d
LP492	F1a'c	16016-16569/1-961	111 129 266 304 519	73 152 249d 263 315+C 523-524d 750
LP518	F1a'c	16014-16569/1-1016	129 183C 189 304 519	73 249d 263 309+CC 315+C 523-524d 750
LP532	F1a'c	16014-16569/1-993	111 129 266 304 519	73 152 249d 263 315+C 523-524d 750
LP098	F1b	16019-16569/1-999	183C 189 232A 249 304 311	73 249d 263 315+C 523-524d 750
LP211	F1b	16021-16569/1-970	183C 189 232A 249 304 311	73 249d 263 315+C 338 523-524d 750
LP246	F1b	16060-16569/1-863	124 183C 189 232A 242 249 266 295 304 519	73 152 249d 263 309+CC 315+C 523-524d 750
LP310	F1b	16030-16569/1-951	129 183C 189 232A 249 304 311	73 203 204 249d 263 309+C 315+C 386A 523-524d 709 750
LP454	F1b	16017-16569/1-911	183C 189 232A 249 304 311	73 249d 263 315+C 523-524d 750
LP478	F1b	16019-16569/1-1017	183C 189 232A 249 304 311	73 249d 263 315+C 523-524d 750
LP479	F1b	16021-16569/1-971	182C 183C 189 232A 249 304 519	73 152 249d 263 309+CC 315+C 523-524d 750
LP505	F1b	16019-16569/1-954	183C 188 189 232A 249 304 311	73 249d 263 315+C 523-524d 750
LP142	F2	16032-16569/1-831	185 266G 291 304 519	73 249d 263 315+C 750
LP143	F2	16031-16569/1-823	185 266G 291 304 519	73 249d 263 315+C 750
LP171	F2	16013-16569/1-927	185 266G 291 304 519	73 249d 263 315+C 750
LP369	F2	16042-16569/1-1042	185 266G 291 304 519	73 249d 263 315+C 747 750 1005
LP483	F2	16021-16569/1-962	145 185 266A 291 304 519	73 249d 263 315+C 747 750
LP001	F2a	16014-16569/1-961	86 167 203 304 318 519	73 249d 263 309+C 315+C 524+AC 750
LP040	F2a	16014-16569/1-908	203 256 291 304 519	73 189 249d 263 309+CC 315+C 750
LP099	F2a	16076-16569/1-1014	86 167 203 304 318 519	73 249d 263 315+C 750 1005
LP185	F2a	16033-16569/1-836	86 167 203 304 318 519	73 249d 263 315+C 750
LP217	F2a	16032-16569/1-935	124 167 203 304 318 519	73 249d 263 315+C 750
LP298	F2a	16038-16569/1-963	203 291 304 519	73 249d 263 309+C 315+C 750
LP336	F2a	16017-16569/1-970	203 291 304 311 335 519	73 93 249d 263 309+CC 315+C 750
LP430	F2a	16018-16569/1-794	86 167 203 304 318 519	73 249d 263 315+C 750
LP438	F2a	16020-16569/1-1000	124 167 203 304 318 519	73 249d 263 315+C 750
LP146	F3a	16020-16569/1-898	260 298 355 362	73 126R 207 249d 263 309+C 315+C 709 750
LP412	F3a	16014-16569/1-1050	260 298 355 362	73 207 249d 263 309+C 315+C 709 750
LP463	F3a	16048-16569/1-885	260 298 311 355 362	73 204 207 249d 263 309+C 315+C 709 750
LP522	F3a	16017-16569/1-1016	260 298 355 362	73 207 249d 263 310+C 315+C 709 750
LP250	F4a	16019-16569/1-950	126 187 207 304 362 399	73 146 249d 263 309+C 315+C 317A 750

LP029	G	16035-16569/1-662	223 294 362	73 183 263 309+C 315+C 489	+
LP053	G	16021-16569/1-967	223 294 344 362	73 263 309+C 315+C 489 709 750	+
LP064	G	16065-16569/1-841	223 294 362	73 183 263 315+C 489 709 750	+
LP218	G	16016-16569/1-954	223 294 362	73 183 186 263 309+C 315+C 489 709 750	+
LP238	G	16016-16569/1-787	223 362 519	73 263 309+C 315+C 489 709 750	+
LP331	G	16018-16569/1-934	223 362	73 152 195 263 315+C 489 709 750	+
LP346	G	16052-16569/1-954	223 287 362	73 263 297 315+C 489 709 750	+
LP359	G	16048-16569/1-1054	192 223 291 311 362	73 151 152 263 315+C 489 709 750	+
LP402	G	16032-16569/1-959	223 294 362	73 183 263 309+C 315+C 489 709 750	+
LP422	G	16032-16569/1-993	223 294 362	73 183 186 263 309+CC 315+C 489 709 750	+
LP476	G	16014-16569/1-939	223 294 362 519	73 183 263 309+C 315+C 489 709 750	+
LP516	G	16018-16569/1-945	223 294 362	73 183 186 263 309+CC 315+C 489 709 750	+
LP184	G1a1a	16049-16569/1-961	223 304 325 362 519	73 150 195 263 315+C 489 709 750	+
LP088	G1a2	16018-16569/1-1000	93 184 223 290 362 519	73 247 263 315+C 489 709 750	
LP070	G1c	16020-16569/1-909	103R 223 362 519	73 263 315+C 489 593 709 750	+
LP324	G1c	16014-16569/1-898	223 362 519	73 263 309+C 315+C 489 593 709 750	+
LP427	G1c	16035-16569/1-993	223 362 519	73 263 309+C 315+C 489 593 709 750	+
LP488	G1c	16013-16569/1-963	223 362 519	73 263 315+C 489 593 709 750	+
LP490	G1c	16053-16569/1-832	223 362 474C 519	73 263 309+CC 315+C 455+T 489 593 709 750	+
LP006	G2a	16072-16569/1-842	223 227 278 362 519	73 150 152 263 309+C 315+C 489 709 750	+
LP020	G2a	16025-16569/1-662	144 223 227 278 362 527	73 146 263 283 309+C 315+C 489	+
LP026	G2a	16032-16569/1-667	223 227 278 362 527	73 146 263 283 309+CC 315+C 489	+
LP172	G2a	16022-16569/1-841	223 278 362	73 195 263 315+C 489 709 750	+
LP244	G2a	16034-16569/1-973	129 223 278 292 362 519	73 263 309+C 315+C 489 709 750	+
LP249	G2a	16059-16569/1-935	129 223 278 292 362 519	73 263 315+C 489 709 750	+
LP308	G2a	16021-16569/1-1050	183C 189 223 278 362	73 263 309+CC 315+C 489 709 750	+
LP431	G2a	16014-16569/1-970	129 223 278 362	73 263 315+C 489 709 750	+
LP496	G2a	16020-16569/1-1017	129 223 278 362	73 263 309+C 315+C 489 709 750	+
LP076	G2a1	16090-16569/1-917	223 227 278 362 527	73 146 263 283 309+CC 315+C 489 709 750	
LP101	G2a1	16017-16569/1-864	223 227 278 362 527	73 146 263 283 309+C 315+C 489 709 750	
LP134	G2a1	16017-16569/1-943	223 227 278 362 465 527	73 146 263 283 309+C 315+C 489 709 750	
LP135	G2a1	16014-16569/1-790	223 227 278 362 465 527	73 146 263 283 309+C 315+C 489 709 750	
LP240	G2a1	16024-16569/1-823	51 114 143 223 227 278 291 362	73 263 315+C 489 709 750	
LP373	G2a1	16019-16569/1-1056	223 227 278 362 527	73 146 263 283 309+C 315+C 489 709 750	
LP508	G2a3	16022-16569/1-981	183C 189 223 278 362	73 260 263 315+C 489 709 750	
LP453	G2b1b	16023-16569/1-760	223 269 318C 362	73 263 315+C 489 523+AC 709 750	+

LP042	G3	16013-16569/1-864	93 150 223 274 362	73 263 315+C 489 709 750	+
LP028	G3a	16013-16569/1-848	223 274 362	73 143 152 227 263 315+C 489 709 750	+
LP390	M*	16021-16569/1-971	86 223 362 381	73 152 195 207 263 309+C 315+C 489 709 750	+
LP495	M*	16014-16569/1-1043	223 249 362	73 263 309+C 315+C 489 735 750	+
LP074	M*	16039-16569/1-833	209 223 343	73 146 263 309+C 315+C 489 523-524d 750	
LP262	M*	16032-16569/1-804	154 223 287 327A 355	73 93 152 200 234 249d 263 282 315+C 489 750	
LP274	M*	16047-16569/1-803	223 318 519	73 150 263 309+CC 315+C 316 489 592 710 750	
LP366	M*	16054-16569/1-1057	188 189 192 223 304 519	73 263 309+CC 315+C 489 750	
LP433	M*	16061-16569/1-845	223 248 271 311 519	73 263 309+C 315+C 489 709 750	
LP467	M*	16019-16569/1-1147	86 172 223 278 519	73 146 150 195 263 315+C 489 523-524d 750 951	
LP513	M*	16020-16569/1-871	86 183 223 278 519	73 146 195 263 315+C 489 523-524d 750	
LP372	M10	16099-16569/1-857	223 241C 294 311 519 524	73 146 263 309+C 315+C 489 573+CCCC 709 750	
LP398	M10	16027-16569/1-866	129 223 311	73 263 315+C 489 573+CCCC 709 750	
LP173	M10a1	16032-16569/1-841	93 129 193 223 311 357 497	73 146 263 309+C 315+C 143 523-524d 709 750	
LP206	M10a1	16001-16569/1-859	129 148 193 223 311 357 497	73 146 263 309+CC 315+C 385 489 523-524d 573+CCCC 709 750	
LP191	M11	16035-16569/1-970	173 223	73 146 200 263 309+C 315+C 318 326 489 750	
LP213	M11	16085-16569/1-963	173 223 261	73 146 200 263 309+C 315+C 318 326 489 750	
LP389	M11	16033-16569/1-965	172 173 223	73 146 152 200 263 309+C 315+C 318 326 489 750	
LP273	M11a1	16025-16569/1-914	173 223	73 146 200 263 309+C 315+C 318 326 489 750	
LP004	M12	16021-16569/1-831	223 234 290 362	73 125 127 128 263 295 309+C 315+C 318 489 513-514d 750	
LP086	M12	16013-16569/1-1039	129 172 223 234 290 519	73 263 315+C 489 523-524d 750	
LP138	M12	16039-16569/1-799	148 172 189 223 234 290 519	73 125 127 128 146 195 263 315+C 489 750	
LP256	M12	16012-16569/1-788	129 172 223 234 290 304 311	73 125 127 263 309+C 315+C 489 523-524d 750	
LP520	M12	16023-16569/1-971	129 172 223 234 290 519	73 263 315+C 489 523-524d 750	
LP014	M12a	16024-16569/1-999	93 148 172 189 223 234 290 519	73 125 127 128 146 195 263 315+C 489 750 979	
LP008	M12b	16017-16569/1-751	129 172 223 290 305 325 354	73 152 263 315+C 489 523-524d 573+CCCC 750	
LP141	M13a	16041-16569/1-886	145 148 188 189 223 381	73 152 263 315+C 489 750	
LP499	M13a	16016-16569/1-954	145 148 188 189 192 223 381	73 152 263 315+C 489 750	
LP399	M13a2	16025-16569/1-954	145 168 188 223 257 311 519	73 152 263 309+C 315+C 489 513 750	
LP062	M20	16086-16569/1-806	129 209 223 272 519	73 152 225 249d 263 309+CC 315+C 316 489 750	
LP236	M20	16056-16569/1-920	129 209 223 272 519	73 152 225 249d 263 309+C 315+C 316 489 523-524d 573+C 750	
LP394	M20	16027-16569/1-988	129 209 223 272 519	73 152 225 249d 263 315+C 316 489 523-524d 750	
LP011	M25	16055-16569/1-928	188 189 192 223 304 324 519	73 263 309+CC 315+C 489 750	
LP080	M25	16015-16569/1-991	188 189 192 223 304 519	73 262 263 309+C 315+C 489 750	
LP482	M25	16018-16569/1-1016	188 189 192 223 304 519	73 263 309+C 315+C 489 750	
LP533	M25	16015-16569/1-952	188 189 192 223 304 519	73 180 263 309+CC 315+C 489 750	

LP268	M45a	16014-16569/1-860	183C 189 193+C 223 300 519	73 143 146 152 263 315+C 489 750	
LP223	M71	16036-16569/1-961	223 271 362 519	73 143 195 204 263 315+C 489 750	+
LP118	M71	16022-16569/1-1081	223 239A 269 271 311	73 150 151 263 309+C 315+C 489 750	
LP334	M71	16051-16569/1-808	223 260 264 271 519	73 151 263 315+C 489 750	
LP362	M71	16038-16569/1-1050	223 269 271 311	73 150 151 263 309+C 315+C 489 750	
LP091	M74	16014-16569/1-966	209 223 311 362 400 519	73 146 185 263 315+C 489 750 979	+
LP121	M74	16035-16569/1-1015	223 311 362 381	63 64 66 73 215 263 315+C 489 523-524d 750	
LP176	M74a	16022-16569/1-971	93 223 311 362 381	63 64 66 73 215 263 315+C 489 523-524d 750	
LP447	M74a	16024-16569/1-945	93 223 311 362 381	63 64 66 73 215 263 310 315+CC 489 523-524d 750	
LP123	M75	16034-16569/1-1050	68 183C 189 223 311 519	73 146 150 152 263 310d 489 523-524d 750 977	
LP155	M75	16026-16569/1-1000	68 126 182C 183C 189 223 325 519	73 146 150 152 195 263 315+C 489 523-524d 750	
LP247	M7b	16023-16569/1-790	223 297 301Y	73 150 199 204 263 309+C 315+C 489 750	
LP282	M7b	16014-16569/1-1017	129 223 297	73 150 159 199 263 315+C 489 750	
LP377	M7b	16033-16569/1-1017	223 297	73 150 199 204 263 315+C 489 750	
LP497	M7b	16014-16569/1-1055	129 223 297	73 150 159 189 199 263 309+C 315+C 489 750	
LP509	M7b	16018-16569/1-913	129 189 223 248 297	73 150 195 199 204 207 263 309+CC 315+C 489 750	
LP061	M7b1	16017-16569/1-913	129 192 223 297 519	73 150 199 263 309+C 315+C 489 750	
LP164	M7b1	16031-16569/1-970	129 192 223 297	73 150 199 263 309+C 315+C 489 750	
LP226	M7b1	16039-16569/1-947	129 192 223 266 297	73 150 159 199 263 309+C 315+C 489 750	
LP237	M7b1	16032-16569/1-867	129 192 223 297	73 150 199 263 309+C 489 750	
LP436	M7b1	16023-16569/1-963	129 192 223 297	73 150 199 263 309+C 315+C 489 750	
LP458	M7b1	16027-16569/1-870	129 189 192 223 297	73 150 194 199 263 332 489 750	
LP460	M7b1	16017-16569/1-964	129 189 192 223 297 519	73 150 199 263 309+C 315+C 461 489 750	
LP461	M7b1	16019-16569/1-801	86 129 189 192 223 297	73 143 150 199 204 207 263 315+C 489 750	
LP503	M7b1	16017-16569/1-958	129 192 223 297 526	73 150 152 182 199 263 315+C 459d 489 750	
LP530	M7b1	16033-16569/1-871	129 192 223 297	73 146 150 195 199 263 309+C 315+C 332 489 750	
LP148	M7b1'2	16032-16569/1-870	129 174 183C 189 223 297	73 150 199 204 263 309+CCC 315+C 489 750	
LP225	M7b1'2	16025-16569/1-865	129 189 223 297	73 150 199 204 263 309+CC 315+C 456 489 750	
LP251	M7b1'2	16036-16569/1-925	129 192 223 297	73 150 182 199 263 315+C 459d 489 750	
LP287	M7c	16055-16569/1-963	223 266 295 519	73 146 152Y 199 263 309+C 315+C 489 523-524d 750	
LP297	M7c	16016-16569/1-1000	223 266 295 519	73 146 152Y 199 263 309+C 315+C 489 523-524d 750	
LP317	M7c	16021-16569/1-906	75 129 223 293T 295 519	73 146 152 199 263 309+C 315+C 489 523-524d 750	
LP404	M7c	16022-16569/1-1055	223 266 295 519	73 146 199 263 309+C 315C+C 489 523-524d 750	
LP475	M7c	16015-16569/1-1017	75 223 293T 519	73 146 152 199 263 309+C 315+C 489 523-524d 750	
LP259	M7c1'2	16037-16569/1-910	223 295 519	73 146 199 263 309+C 315+C 489 523-524d 709 750	
LP235	M7c3	16031-16569/1-771	519	73 146A 199 204 263 309+CC 315+C 489 523-524d 750	

LP385	M7c3	16031-16569/1-959	181 519	73 146A 199 263 309+C 315+C 489 523-524d 750
LP159	M7e	16015-16569/1-969	172 223 311 519	73 93 146 263 309+C 315+C 489 523-524d 750
LP003	M8a2	16014-16569/1-875	184 223 298 319	73 263 309+C 315+C 489 750
LP013	M8a2	16038-16569/1-658	134 184 223 298 319	73 263 309+CC 315+C 480 489
LP051	M8a2	16005-16569/1-1016	93 184 189 223 298 319 443 470 471 473	73 195 263 309+C 315+C 489 523-524d 750
LP073	M8a2	16013-16569/1-829	184 223 298 319	73 263 309+C 315+C 489 750
LP112	M8a2	16058-16569/1-997	184 223 298 319	73 152 263 309+C 315+C 489 750
LP325	M8a2	16018-16569/1-915	184 223 260 298 319	73 152 263 309+CC 315+C 489 750
LP227	M9a	16025-16569/1-907	223 234 362	73 153 263 309+C 315+C 489 750
LP023	M9a1a	16013-16569/1-667	223 234 316 362 519	73 153 249 263 309+C 315+C 489
LP187	M9a1a	16019-16569/1-959	223 234 316 362	73 146 153 263 309+C 315+C 489 750
LP529	M9a1a	16020-16569/1-1049	223 234 291 316 362	73 153 263 309+CC 315+C 489 750 1041
LP278	M9a1a1c1a	16048-16569/1-831	223 234 291 316 362	73 153 263 309+C 315+C 489 750
LP519	M9a1a2	16017-16569/1-927	145 189 223 234 316	73 153 263 315+C 489 513 523-524d 750
LP067	M9a1b1	16085-16569/1-904	158 223 234 362 519	73 146 150 152 153 263 309+C 315+C 489 750
LP075	M9a1b1	16017-16569/1-768	158 223 234 362 519	73 150 152 153 263 309+C 315+C 489 750
LP340	M9a1b1	16014-16569/1-823	158 223 234 362 519	73 150 152 153 195 263 315+C 489 750
LP360	M9a1b1	16032-16569/1-867	158 223 234 290 362 519	73 150 152 153 263 315+C 489 750
LP374	M9a1b1	16032-16569/1-1055	158 183 223 234 243 362 519	73 150 151 152 153 263 309+C 315+C 489 750 1041
LP047	M9a4a	16032-16569/1-879	223 234 260 271 362	73 146 151 153 263 309+CC 315+C 489 750
LP386	N*	16024-16569/1-961	223 304 344 362 381 519	73 263 309+C 315+C 750
LP234	N10a	16021-16569/1-944	93 111 163 172 183C 189 223 362 519	73 185 189 195 234 263 309+C 315+C 523-524d
LP270	N10a	16033-16569/1-814	111 172 183C 189 223 311 362 519	73 185 189 195 234 257 263 309+CC 315+C 523-524d
LP426	N10a	16041-16569/1-837	111 172 183C 189 223 362 519	73 185 189 195 234 263 309+CC 315+C 523-524d
LP459	N10a	16024-16569/1-904	172 183C 189 223 362	73 185 189 263 291+A 315+C 523-524d
LP401	N11	16014-16569/1-986	145 189 223 355 519	73 195 240 263 315+C 523-524d 750 813
LP414	N11a1	16016-16569/1-757	145 189 223 355 519	73 195 240 263 315+C 523-524d 750
LP353	N21	16037-16569/1-1101	182 193 223 289 519	73 150 195 263 315+C 337d 750
LP356	N21	16045-16569/1-1014	193 223 519	73 150 195 263 309+C 315+C 337d 523-524d 750
LP082	N9a	16023-16569/1-898	223 257A 261 292 519	73 150 263 309+CC 315+C 316 750
LP137	N9a	16015-16569/1-959	51 172 223 257A 261	73 150 185 263 309+C 315+C 750
LP147	N9a	16033-16569/1-988	223 257A 261 311 390	73 150 263 309+CC 315+C 750
LP160	N9a	16017-16569/1-898	223 257A 261 311 390	73 150 263 309+CC 315+C 750
LP170	N9a	16012-16569/1-959	51 172 223 257A 261	73 150 185 263 309+CC 315+C 750
LP202	N9a	16031-16569/1-882	86 223 257A 261 311	73 150 263 309+C 315+C 750
LP448	N9a	16035-16569/1-874	223 257A 261 292 362 519	73 150 263 309+C 315+C 316 750

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LP452	N9a	16019-16569/1-832	223 257A 261 292 519	73 150 263 309+C 315+C 750
LP534	N9a	16015-16569/1-954	51 223 257A 261	73 150 185 263 309+C 315+C 750
LP044	N9a1	16014-16569/1-873	111 129 223 257A 261	73 150 263 310 315+CCC 750
LP411	N9a1	16026-16569/1-982	111 129 189 223 257A 261	73 150 263 315+C 750
LP527	N9a1	16025-16569/1-965	111 129 223 257A 261	73 150 263 315+C 750
LP290	N9a1'3	16039-16569/1-760	129 223 257A 261	73 150 263 309+CC 315+C 666 750
LP383	R9	16022-16569/1-870	519	73 249d 263 315+C 518 750
LP119	R9b	16024-16569/1-768	93 189 288 304 309 390 519	73 143 183 263 309+C 315+C 523-524d 573+CCCCC 750
LP005	R9b1b	16012-16569/1-662	124 148 275 304 309 327 390 519	73 263 309+C 315+C 523-524d
LP030	R9b1b	16015-16569/1-835	124 148 304 309 390 519	73 263 309+C 315+C 750
LP337	R9b2	16020-16569/1-1000	304 362 519	73 263 315+C 750
LP305	R9c	16026-16569/1-1113	93 157 304	73 151 263 309+C 315+C 479 523+AC 750
LP352	U2e1'2	16038-16569/1-971	51 92 129C 183C 189 311 362 391 519	73 152 199 217 263 309+CC 315+C 508 523+CA 750
LP002	Z	16014-16569/1-918	185 223 260 298	73 151 152 249d 263 315+C 489 750
LP041	Z	16012-16569/1-670	185 223 260 298	73 152 249d 263 309+CC 315+C 489 513
LP150	Z	16032-16569/1-842	185 189 223 260 298	73 152 249d 263 309+C 315+C 489 513 750
LP199	Z	16051-16569/1-758	185 209 223 260 298	73 143 152 249d 263 309+CC 315+C 489 750
LP204	Z	16055-16569/1-964	185 223 260 265C 298 302R	73 151 152 249d 263 309+C 315+C 455+T 489 523-524d 750
LP209	Z	16018-16569/1-952	185 223 260 298	73 152 249d 263 309+C 315+C 489 513 750
LP260	Z	16020-16569/1-911	185 209 223 260 298	73 143 152 263 309+C 315+C 489 523+CA 750
LP275	Z	16039-16569/1-900	185 223 260 298 302	73 152 249d 263 315+C 489 750
LP285	Z	16014-16569/1-1070	185 223 260 298	73 152 249d 263 309+C 315+C 489 513 750
LP294	Z	16022-16569/1-971	185 223 260 298 311	73 152 249d 263 309+C 315+C 489 513 750
LP296	Z	16016-16569/1-964	185 223 260 298 302	73 152 249d 263 315+C 489 750
LP322	Z	16023-16569/1-950	185 223 260 298	73 152 249d 263 309+C 315+C 489 513 750 789
LP328	Z	16014-16569/1-904	185 223 260 298	73 152 249d 263 309+C 315+C 489 513 750
LP338	Z	16022-16569/1-735	185 223 260 298	73 152 249d 263 309+C 315+C 489 513
LP358	Z	16051-16569/1-1015	185 223 260 298	73 152 249d 263 309+C 315+C 489 513 750
LP364	Z	16040-16569/1-1023	185 223 260 298	73 152 249d 263 309+C 315+C 489 513 750
LP370	Z	16052-16569/1-1055	185 223 260 298 302	73 152 249d 263 309+C 315+C 489 750
LP388	Z	16032-16569/1-870	185 223 260 294 298	73 150 152 249d 263 309+C 315+C 489 523-524d 750
LP407	Z	16014-16569/1-795	185 223 260 298	73 152 249d 263 309+C 315+C 489 513 750
LP517	Z	16014-16569/1-895	185 223 260 291 298	73 151 152 249d 263 309+C 315+C 489 750

Controls

YXLPCT196	A	16038-16569/1-870	129T 172 188 223 290 319 519	73 235 263 309+C 315+C 523-524d 663 750
YXLPCT262	A	16013-16569/1-870	51 93 129 182C 183C 189 223 290 319 519	73 143 152 235 263 523-524d 663 750

YXLPCT320	A	16017-16569/1-870	129T 172 188 223 290 319 519	73 235 263 309+C 315+C 523-524d 663 750
YXLPCT494	A	16042-16569/1-959	223 290 319	64 73 146 235 263 315+C 523-524d 663 750
YXLPCT089	A11	16062-16569/1-870	193 223 234 290 293C 319 519	73 152 235 263 309+C 315+C 523-524d 663 750
YXLPCT112	A11	16017-16569/1-870	223 234 290 293C 319 519	73 152 235 263 309+CC 315+C 523-524d 663 750
YXLPCT125	A11	16079-16569/1-870	223 234 290 293C 319 519	73 152 235 263 309+CC 315+C 523-524d 663 750
YXLPCT129	A11	16062-16569/1-870	223 234 290 293C 319 519	73 152 235 263 309+CC 315+C 523-524d 663 750
YXLPCT132	A11	16045-16569/1-870	223 234 290 293C 319 519	73 152 235 263 309+C 315+C 523-524d 663 750
YXLPCT134	A11	16014-16569/1-870	223 234 290 293C 319 519	73 152 235 263 315+C 523-524d 663 750
YXLPCT193	A11	16064-16569/1-870	223 234 290 239C 311 319 519 527	73 152 194 207 235 263 315+C 523-524d 663 709 750
YXLPCT252	A11	16024-16569/1-870	223 234 290 293C 309 319 519	73 152 235 263 309+C 315+C 523-524d 663 750
YXLPCT258	A11	16033-16569/1-909	223 234 290 293C 319 519	73 152 235 263 309+CC 315+C 523-524d 663 750
YXLPCT406	A11	16028-16569/1-868	223 234 290 293C 319 519 527	73 152 235 263 309+C 315+C 523-524d 663 750
YXLPCT439	A11	16030-16569/1-783	223 290 293C 319 519	73 152 235 263 309+C 315+C 523-524d 663 750
YXLPCT512	A11	16044-16569/1-1016	223 234 290 293C 319 519	73 152 235 263 309+C 315+C 523-524d 663 750
YXLPCT562	A11	16033-16569/1-870	223 234 290 293C 319 519 527	73 152 235 263 309+CC 315+C 523-524d 663 750
YXLPCT570	A11	16023-16569/1-870	94 223 234 290 293C 311 319 519 527	73 152 194 207 235 263 309+C 315+C 523-524d 663 709 750
YXLPCT668	A11	16021-16569/1-870	223 234 290 293C 319 519 527	73 152 194 207 235 263 309+C 315+C 523-524d 663 709 750
YXLPCT724	A11	16024-16569/1-870	192 223 234 290 293C 319 519	73 152 235 263 309+C 315+C 523-524d 663 750
YXLPCT757	A11	16018-16569/1-963	223 234 290 293C 319 519	73 152 235 263 309+C 315+C 523-524d 663 750
YXLPCT829	A11	16013-16569/1-870	223 234 290 293C 311 319 519 527	73 152 194 207 235 263 315+C 523-524d 663 709 750
YXLPCT845	A11	16058-16569/1-963	223 234 290 293C 311 319 519 527	73 152 194 235 263 315+C 523-524d 663 709 750
YXLPCT038	A4	16033-16569/1-904	223 290 319 362	73 146 152 153 235 315+C 523-524d 663 750
YXLPCT048	A4	16014-16569/1-908	223 290 319 362	73 146 152 153 235 315+C 523-524d 663 750
YXLPCT054	A4	16050-16569/1-902	223 290 319 362	73 151 152 200 235 263 315+C 523-524d 663 735 750
YXLPCT076	A4	16045-16569/1-909	223 290 319 362	73 152 156 235 263 315+C 523-524d 663 750
YXLPCT085	A4	16016-16569/1-909	223 290 319 362	73 152 235 263 309+C 315+C 523-524d 663 750
YXLPCT087	A4	16041-16569/1-852	223 284 290 319 362	73 152 235 263 309+C 315+C 460 523-524d 663 750
YXLPCT123	A4	16020-16569/1-870	223 290 319 362	73 140 152 207 235 309+C 315+C 523-524d 663 750
YXLPCT151	A4	16032-16569/1-870	95 223 290 319 362	73 152 235 263 315+C 523-524d 654 663 750
YXLPCT186	A4	16057-16569/1-870	223 290 319 362	73 152 207 235 309+C 315+C 523-524d 554 663
YXLPCT202	A4	16053-16569/1-893	209 223 274 290 319 362 519 527	73 152 235 263 309+C 315+C 523-524d 663 750
YXLPCT259	A4	16032-16569/1-870	223 290 319 362	73 152 195 207 235 309+CC 315+C 372 523-524d 663 750
YXLPCT313	A4	16024-16569/1-870	86 150 223 290 319 362	73 152 235 263 309+C 315+C 523-524d 663 750
YXLPCT315	A4	16014-16569/1-870	124 214 223 290 319 362	73 152 200 235 263 309+CC 315+C 523-524d 663 750
YXLPCT321	A4	16051-16569/1-908	223 235 290 311 319 362 519	73 152 234 235 263 309+C 315+C 523-524d 663 750
YXLPCT365	A4	16072-16569/1-894	129 223 290 319 362	73 152 235 263 315+C 523-524d 663 750

YXLPCT387	A4	16031-16569/1-809	223 274 290 319 362 527	73 152 235 263 315+C 523-524d 663 711 750
YXLPCT437	A4	16028-16569/1-870	223 234 235 290 311 319 362 519	73 152 234 235 263 309+C 315+C 523-524d 663 750
YXLPCT446	A4	16027-16569/1-870	223 290 319 362	73 152 156 159 235 309+C 315+C 523-524d 663 709 750
YXLPCT474	A4	16026-16569/1-870	125 223 290 311 319 362	73 152 235 263 309+C 315+C 523-524d 576 663 750
YXLPCT478	A4	16017-16569/1-1000	223 290 319 362	73 151 152 200 235 263 315+C 523-524d 663 714T 735 750
YXLPCT490	A4	16014-16569/1-965	223 290 319 362	73 151 152 200 235 263 309+C 315+C 523-524d 663 735 750
YXLPCT498	A4	16014-16569/1-954	223 290 319 362	73 152 156 235 263 315+C 523-524d 663 750
YXLPCT556	A4	16021-16569/1-870	223 290 319 362	73 151 152 200 235 263 309+C 315+C 523-524d 663 714T 735 750
YXLPCT566	A4	16052-16569/1-870	93 129 136 223 284 290 295 319 362 519	73 152 235 263 309+C 315+C 523-524d 663 750
YXLPCT600	A4	16052-16569/1-870	93 129 136 223 284 290 295 319 362 519	73 152 235 263 309+C 315+C 523-524d 663 750
YXLPCT630	A4	16027-16569/1-889	223 290 319 362	73 152 235 263 315+C 523-524d 663 750
YXLPCT665	A4	16032-16569/1-848	235 290 311 319 362 519 527	73 152 199 234 235 263 309+C 315+C 523-524d 573+CCCCCC 663 750
YXLPCT678	A4	16052-16569/1-870	86 150 223 290 319 362	73 152 235 263 309+C 315+C 523-524d 663 750
YXLPCT686	A4	16039-16569/1-819	235 290 311 319 362 519 527	73 152 199 234 235 263 309+C 315+C 523-524d 573+CCCC 663 750
YXLPCT700	A4	16071-16569/1-790	223 274 290 319 362 519 527	73 152 235 263 309+C 315+C 523-524d 663 750
YXLPCT711	A4	16021-16569/1-870	223 235 290 311 319 362 519	73 152 234 235 263 309+C 315+C 523-524d 663 750
YXLPCT721	A4	16018-16569/1-870	223 274 290 319 362 527	73 152 235 263 315+C 523-524d 663 750
YXLPCT741	A4	16017-16569/1-929	223 290 319 362	73 152 235 263 309+C 315+C 524+ACAC 663 750
YXLPCT771	A4	16020-16569/1-927	223 290 319 362	73 151 152 200 235 263 315+C 523-524d 663 735 750
YXLPCT783	A4	16020-16569/1-906	223 290 319 362	73 152 156 235 263 315+C 523-524d 663 750
YXLPCT784	A4	16015-16569/1-870	223 235 290 311 319 362 519	73 152 234 235 263 315+C 523-524d 663 750
YXLPCT787	A4	16018-16569/1-954	125 223 290 311 319 362	73 152 235 263 309+C 315+C 523-524d 576 663 750
YXLPCT809	A4	16026-16569/1-961	223 235 290 311 319 362 519	73 152 234 235 263 309+CC 315+C 523-524d 663 750
YXLPCT814	A4	16017-16569/1-870	223 290 319 362	73 152 156 235 263 315+C 523-524d 663 750
YXLPCT840	A4	16042-16569/1-959	129 223 290 319 362	73 152 200 204 235 263 309+C 315+C 523-524d 663 750
YXLPCT030	A4c	16022-16569/1-870	147A 172 223 290 319 362	73 152 200 235 263 309+C 315+C 523-524d 663 750
YXLPCT127	A4c	16028-16569/1-870	223 290 319 362	73 151 152 200 235 263 315+C 523-524d 663 735 750
YXLPCT220	A4c	16021-16569/1-870	223 231 290 319 362	73 151 152 200 235 263 315+C 523-524d 663 735 750
YXLPCT234	A4c	16086-16569/1-860	124 223 290 319 362	73 152 200 235 263 309+C 315+C 523-524d 663 750
YXLPCT335	A4c	16024-16569/1-870	176 223 290 319 362	73 152 200 235 263 315+C 523-524d 663 750
YXLPCT360	A4c	16050-16569/1-771	124 223 290 319 362	73 152 200 235 263 315+C 523-524d 663 750
YXLPCT384	A4c	16039-16569/1-813	124 223 290 319 362	73 152 200 235 263 309+C 315+C 523-524d 663 750
YXLPCT538	A4c	16033-16569/1-870	124 223 290 319 362	73 152 200 235 263 309+CC 315+C 523-524d 663 750
YXLPCT609	A4c	16032-16569/1-870	124 223 290 319 362	73 152 200 235 263 309+CC 315+C 523-524d 663 750
YXLPCT631	A4c	16050-16569/1-870	124 223 290 319 362	73 152 200 235 263 309+C 315+C 523-524d 663 750
YXLPCT750	A4c	16038-16569/1-767	86 223 290 319 362	73 151 152 200 235 263 279 315+C 523-524d 663 735 750

YXLPCT756	A4c	16045-16569/1-870	124 223 290 319 362	73 152 200 235 263 309+CC 315+C 523-524d 663 750
YXLPCT793	A4c	16020-16569/1-1002	124 223 290 319 362	73 152 200 235 263 309+CC 315+C 523-524d 663 750
YXLPCT806	A4c	16013-16569/1-870	124 223 290 319 362	73 152 200 235 263 309+C 315+C 523-524d 663 750
YXLPCT811	A4c	16039-16569/1-899	124 223 290 319 362	73 152 200 235 263 309+C 315+C 523-524d 663 750
YXLPCT827	A4c	16018-16569/1-870	124 223 290 319 362 519	73 152 200 235 263 309+C 315+C 523-524d 663 750
YXLPCT632	A5b	16045-16569/1-870	126 223 235 290 297 319 519	73 235 263 309+C 315+C 523-524d 663 750
YXLPCT351	B*	16033-16569/1-870	179 183C 189 209 319	73 150 263 309+C 315+C 750
YXLPCT398	B*	16039-16569/1-870	93 179 182C 183C 189	73 150 263 309+CC 315+C 750
YXLPCT453	B*	16031-16569/1-870	179 182C 183C 189 209 319	73 150 263 309+CC 315+C 750
YXLPCT567	B*	16051-16569/1-870	86 129 182C 183C 189 261 297	73 263 309+3C 315+C 523-524d 750
YXLPCT693	B*	16032-16569/1-870	93 179 182C 183C 189 342	73 150 152 263 309+CC 315+C 523-524d 750
YXLPCT003	B4	16017-16569/1-882	108 182C 183C 189 217 362G 519	73 263 309+CC 315+C 523-524d 750
YXLPCT012	B4	16018-16569/1-870	182C 183C 189 217 274	73 214 263 309+3C 315+C 368 709 750
YXLPCT096	B4	16032-16569/1-806	129 182C 183C 189 217 519	73 189 263 309+C 523-524d 750
YXLPCT102	B4	16021-16569/1-870	108 182C 183C 189 217 362 519	73 263 309+C 315+C 523-524d 750
YXLPCT104	B4	16019-16569/1-804	108 182C 183C 189 217 362G 519	73 263 309+CC 315+C 523-524d 750
YXLPCT154	B4	16025-16569/1-772	108 182C 183C 187+T 189 193+C 217 362G 519	73 146 263 309+CC 315+C 523-524d 750
YXLPCT280	B4	16023-16569/1-870	129 182C 183C 189 217 519	73 263 309+3C 315+C 523-524d 750
YXLPCT618	B4	16015-16569/1-870	178 182C 183C 189 217	73 214 263 309 310 368 709 750
YXLPCT684	B4	16036-16569/1-870	108 182C 183C 189 217 243 362 519	73 263 309+CC 315+C 523-524d 750
YXLPCT690	B4	16034-16569/1-886	93 182C 183C 189 217 222 362 519	73 263 309+CC 315+C 372 523-524d 750
YXLPCT727	B4	16018-16569/1-870	108 182C 183C 189 217 293C 362 519	73 263 309+CC 315+C 523-524d 750
YXLPCT734	B4	16038-16569/1-870	129 182C 183C 189 217 519	73 263 309+C 315+C 523-524d 750
YXLPCT802	B4	16022-16569/1-954	108 182C 183C 189 217 362 519	73 263 309+CC 315+C 523-524d 750
YXLPCT803	B4	16012-16569/1-870	129 182C 183C 189 217 519	73 263 309+CC 315+C 523-524d 750
YXLPCT706	B4a	16033-16569/1-898	182C 183C 189 217 261 299 519	73 193 263 309+C 315+C 523-524d 709 750
YXLPCT516	B4a1a	16018-16569/1-799	182C 183C 189 217 261 274 289 519	73 146 183 195 263 310d 374 750
YXLPCT094	B4a1c	16016-16569/1-870	182C 183C 189 217 261 299 519	73 93 193 263 310 523-524d 709 719 750
YXLPCT358	B4a1c	16024-16569/1-1002	93 182C 183C 188 189 214 217 243 261 519	73 146 263 309+C 315+C 523-524d 709 750
YXLPCT419	B4a1c	16041-16569/1-809	93 182C 183C 188Y 189 193+C 214 217 261 519	73 146 263 309+C 315+C 523-524d 709 750
YXLPCT480	B4a1c	16014-16569/1-1000	167 179 183C 183C 189 217 261 317T 519	73 146 263 309+CC 315+C 523-524d 709 750
YXLPCT578	B4a1c	16038-16569/1-870	93 182C 183C 189 217 243 261 278 519	73 146 150 263 309+CC 315+C 523-524d 709 750
YXLPCT170	B4a1c2	16035-16569/1-870	167 182C 183C 189 217 261 519	73 146 263 309+C 315+C 523-524d 709 750
YXLPCT029	B4a'g	16032-16569/1-870	129 168 182C 183C 189 217 261 311 390	73 263 309+CC 315+C 523-524d 750
YXLPCT095	B4a'g	16031-16569/1-870	150 182C 183C 189 217 261 519	73 146 263 309+CC 315+C 523-524d 709 750
YXLPCT106	B4a'g	16020-16569/1-870	150 182C 183C 189 217 261 519	73 146 263 309+CC 315+C 523-524d 709 750

YXLPCT152	B4a'g	16017-16569/1-790	182C 183C 189 217 240 261	73 263 309+CC 315+C 523-524d 750
YXLPCT166	B4a'g	16028-16569/1-904	92 182C 183C 189 217 261 399 519	73 200 263 309+CC 315+C 523-524d 750
YXLPCT169	B4a'g	16025-16569/1-784	182C 183C 189 217 240 261	73 263 309+C 315+C 523-524d 750
YXLPCT239	B4a'g	16032-16569/1-870	182C 183C 189 217 240 261	73 263 309+C 315+C 523-524d 750
YXLPCT271	B4a'g	16033-16569/1-806	129 182C 183C 189 217 261 354	73 263 309+CC 315+C 523-524d 750
YXLPCT277	B4a'g	16022-16569/1-910	182C 183C 189 217 240 261	73 263 309+C 315+C 523-524d 750
YXLPCT293	B4a'g	16018-16569/1-870	182C 183C 189 217 240 261	73 263 309+CC 315+C 523-524d 750
YXLPCT334	B4a'g	16016-16569/1-870	182C 183C 189 217 240 261	73 263 309+C 315+C 523-524d 750
YXLPCT354	B4a'g	16051-16569/1-786	93 182C 183C 189 217 261	73 263 315+C 750
YXLPCT420	B4a'g	16044-16569/1-885	129 182C 183C 189 217 261 354	73 263 309+CC 315+C 493 523-524d 750
YXLPCT531	B4a'g	16066-16569/1-898	182C 183C 189 217 243 261 278 519	73 146 150 263 309+C 315+C 523-524d 633T 709 750
YXLPCT546	B4a'g	16018-16569/1-1000	92 182C 183C 189 217 261 399 519	73 200 263 309+CC 315+C 523-524d 750
YXLPCT577	B4a'g	16026-16569/1-870	92 182C 183C 189 217 261 299 519	73 193 263 315+C 523-524d 709 750
YXLPCT585	B4a'g	16046-16569/1-908	182C 183C 189 217 240 261	73 263 309+3C 315+C 523-524d 750
YXLPCT593	B4a'g	16053-16569/1-907	129 182C 183C 189 217 261 354	73 263 315+C 523-524d 750
YXLPCT602	B4a'g	16032-16569/1-806	182C 183C 189 217 222 261	73 204 263 309 310 750
YXLPCT622	B4a'g	16028-16569/1-797	92 182C 183C 217 261 399 519	73 131 200 263 309+CC 315+C 523-524d 750
YXLPCT641	B4a'g	16055-16569/1-870	182C 183C 189 217 240 261	73 263 309+CC 315+C 523-524d 750
YXLPCT698	B4a'g	16077-16569/1-907	182C 183C 189 217 240 261	73 263 309+CC 315+C 523-524d 750
YXLPCT722	B4a'g	16023-16569/1-904	129 182C 183C 189 217 261	73 146 263 309+CC 315+C 523-524d 750
YXLPCT759	B4a'g	16014-16569/1-965	168 182C 183C 189 217 261 311 519	73 146 263 309+CC 315+C 523-524d 750
YXLPCT772	B4a'g	16019-16569/1-870	182C 183C 189 217 261	73 263 309+C 315+C 750
YXLPCT818	B4a'g	16017-16569/1-965	182C 183C 189 217 219 261 286 519	73 263 307-309d 315+C 523-524d 750
YXLPCT819	B4a'g	16017-16569/1-870	93 182C 183C 189 217 261 465	73 263 315+C 711 750
YXLPCT820	B4a'g	16026-16569/1-983	92 182C 183C 189 217 261 399 519	73 200 263 309+C 315+C 523-524d 750
YXLPCT047	B4b1	16025-16569/1-887	136 175 183C 189 217 218 519	73 263 309+CC 315+C 499 750 827
YXLPCT590	B4b1	16046-16569/1-870	136 183C 189 217 519	73 263 309+CC 315+C 499 750 827
YXLPCT588	B4b1a	16026-16569/1-823	136 182C 183C 189 217 519	73 207 263 309+CC 315+C 499 750
YXLPCT661	B4b1a	16025-16569/1-893	136 182C 183C 189 217 519	73 207 263 309+CC 315+C 499 750 827
YXLPCT235	B4b1b'c	16064-16569/1-830	136 183C 189 217 218 519	73 263 309+CC 315+C 456 499 750 827
YXLPCT643	B4b1b'c	16014-16569/1-868	136 182C 183C 189 217 218 344 519	73 263 309+CC 315+C 499 750 827
YXLPCT017	B4b'd	16033-16569/1-870	182C 183C 189 217 234 519	73 152 263 309+C 315+C 750 827
YXLPCT045	B4b'd	16040-16569/1-892	150 182C 183C 189 217 234 249 519	73 263 309+C 315+C 556T 750 827
YXLPCT065	B4b'd	16033-16569/1-869	183C 189 217 234 519	73 152 263 309+CC 315+C 709 750 827
YXLPCT078	B4b'd	16038-16569/1-874	182C 183C 189 217 223 519	73 146 185 189 195 263 309+C 315+C 513 750 827
YXLPCT133	B4b'd	16032-16569/1-870	183d 186 189 217 234 245 519	73 197 263 309+C 315+C 508 546 750 827

YXLPCT217	B4b'd	16048-16569/1-892	183C 189 217 234 519	73 263 309+C 315+C 750 827
YXLPCT226	B4b'd	16042-16569/1-870	86 172 183C 189 217 274 519	73 263 309+C 315+C 316 750 827
YXLPCT227	B4b'd	16017-16569/1-901	183C 189 217 234 519	73 263 309+C 315+C 750 827
YXLPCT229	B4b'd	16045-16569/1-870	140 150 183C 189 217 234 249 519	73 263 315+C 556T 750 827
YXLPCT254	B4b'd	16023-16569/1-870	140 150 183C 189 217 234 249 519	73 263 315+C 556T 750 827
YXLPCT278	B4b'd	16024-16569/1-870	183C 189 217 234 519	73 263 309+C 315+C 750 827
YXLPCT314	B4b'd	16021-16569/1-904	183C 189 217 234 519	73 263 309+C 315+C 750 827
YXLPCT329	B4b'd	16068-16569/1-870	183d 186 189 217 519	73 152 200 263 309+C 315+C 316 750 827
YXLPCT402	B4b'd	16052-16569/1-849	186 189 217 234 245 519	73 197 263 309+C 315+C 508 546 750 827
YXLPCT413	B4b'd	16056-16569/1-904	183C 189 217 519	55 56 73 146 207 263 309+C 315+C 750 827
YXLPCT433	B4b'd	16025-16569/1-870	92 183C 189 217 519	73 152 263 309+C 315+C 750 827
YXLPCT582	B4b'd	16032-16569/1-870	129 182C 183C 189 217 223 519	73 146 150 185 189 196 263 309+C 315+C 513 750 827
YXLPCT645	B4b'd	16043-16569/1-903	182C 183C 189 217 234 360 519	73 195 263 309+CC 315+C 750 827
YXLPCT824	B4b'd	16034-16569/1-999	172 183C 189 217 274 519	73 263 309+CC 315+C 523-524d 750 827
YXLPCT223	B4c1	16026-16569/1-870	140 182C 183C 189 194C 195 217 274 335 519	42+G 73 146 150 263 309+3C 315+C 709 750
YXLPCT247	B4c1	16021-16569/1-870	140 182C 183C 189 217 274 335 519	73 146 150 189 195 263 309+CC 315+C 709 750
YXLPCT447	B4c1	16042-16569/1-866	140 182C 183C 189 194C 195 217 274 335 519	42+G 73 146 150 263 309+CC 315+C 709 750
YXLPCT486	B4c1	16018-16569/1-954	140 182C 183C 189 217 274 335 519	73 146 150 189 195 263 309+CC 315+C 709 750
YXLPCT681	B4c1	16027-16569/1-870	140 182C 183C 189 217 274 335 519	73 146 150 195 263 309+CC 315+C 537 709 750
YXLPCT063	B4c1b	16061-16569/1-973	129 140 166 183C 189 217 274 335 400 519	73 150 189 263 315+C 709 750
YXLPCT426	B4c1b	16044-16569/1-870	136 140 183C 189 217 249 280 291 335 519	73 150 263 309+C 315+C 709 750
YXLPCT617	B4c1b	16013-16569/1-870	129 140 166 183C 189 217 274 335 390 519	73 150 263 309+C 315+C 709 750
YXLPCT688	B4c1b	16032-16569/1-870	129 140 166 183C 189 217 274 335 390 519	73 150 263 309+C 315+C 709 750
YXLPCT822	B4c1b	16020-16569/1-1000	140 183C 189 217 274 305T 335 519	73 150 195 263 309+CC 315+C 709 750
YXLPCT469	B4c1b2	16040-16569/1-870	140 182C 183C 189 217 242A 274 293 336+G 519	73 146 147+C 150 263 315+C 523-524d 709 750
YXLPCT744	B4c1b2	16020-16569/1-870	93 140 183C 189 217 274 316	73 146 150 263 309+C 315+C 709 750
YXLPCT004	B4c2	16026-16569/1-870	147 183C 184A 189 217 235 519	73 263 309+C 315+C 523-524d 750
YXLPCT080	B4c2	16050-16569/1-860	147 183C 184A 189 217 234 235 519	73 263 309+C 315+C 523-524d 750
YXLPCT136	B4c2	16020-16569/1-870	93 147 183C 189 217 235 519	73 263 309+CC 315+C 523-524d 750
YXLPCT167	B4c2	16033-16569/1-870	147 182+C 189 217 235 519	73 263 309+C 315+C 750
YXLPCT495	B4c2	16013-16569/1-959	147 183C 184A 189 217 234 235 519	73 263 309+C 315+C 523-524d 750
YXLPCT502	B4c2	16025-16569/1-961	147 162 183C 184A 189 217 519	73 263 309+C 315+C 709 750
YXLPCT523	B4c2	16022-16569/1-870	147 182+C 189 217 235 519	73 263 309+C 315+C 523-524d 750
YXLPCT573	B4c2	16039-16569/1-870	147 183C 184A 189 217 235 519	73 199 263 309+C 315+C 750
YXLPCT596	B4c2	16038-16569/1-806	147 183C 184A 189 217 235 519	73 263 309+C 315+C 523-524d 750
YXLPCT042	B4g	16024-16569/1-907	129C 181C 182C 183C 189 213 217 261 292 519	73 263 309 310 523-524d 750

YXLPCT071	B4g	16019-16569/1-902	181C 182C 183C 189 213 217 242 261 292 301 519	61A 62 73 183 263 307-309d 315+C 523-524d 750
YXLPCT506	B4g	16026-16569/1-1002	181C 182C 183C 189 209 213 217 261 292 519	73 150 263 315+C 523-524d 750
YXLPCT545	B4g	16016-16569/1-1002	181C 182C 183C 189 213 217 243 261 287 292 301 355 359 519	61A 62 73 263 309+C 315+C 523-524d 709 750
YXLPCT001	B5a	16035-16569/1-907	140 183C 189 266A 519	73 210 263 309+CC 315+C 523-524d 709 750
YXLPCT002	B5a	16018-16569/1-870	140 189 266G 291 519	73 210 263 309+C 315+C 523-524d 709 750
YXLPCT031	B5a	16015-16569/1-870	140 182C 183C 189 266A 519	73 210 263 315+C 523-524d 593 709 750
YXLPCT066	B5a	16073-16569/1-918	92 129 140 182C 183C 189 266A 519	73 210 263 309+C 315+C 523-524d 709 750
YXLPCT067	B5a	16038-16569/1-930	92 140 183C 189 266A 519	73 210 263 315+C 523-524d 709 750
YXLPCT120	B5a	16060-16569/1-870	140 182C 183C 189 261 266A 519	73 152 210 263 309+C 315+C 523-524d 709 750
YXLPCT159	B5a	16027-16569/1-870	182C 183C 189 266A 519	73 210 263 309+CC 315+C 523-524d 709 750
YXLPCT160	B5a	16017-16569/1-758	140 182C 183C 189 261 266A 311Y 519	73 152 210 263 309+3C 315+C 523-524d 709 750
YXLPCT185	B5a	16017-16569/1-870	140 183C 189 262 266A 519	64 73 210 263 315+C 523-524d 593 709 750
YXLPCT231	B5a	16020-16569/1-920	140 183C 189 266A 519	73 210 263 309+C 315+C 523-524d 593 709 750
YXLPCT268	B5a	16026-16569/1-870	140 183C 189 266A 519	73 210 263 309+CC 315+C 523-524d 709 750
YXLPCT269	B5a	16018-16569/1-868	140 182C 183C 189 266A 519	73 210 263 315+C 523-524d 709 750
YXLPCT311	B5a	16019-16569/1-913	140 183C 189 262 266A 519	64 73 210 263 315+C 523-524d 593 709 750
YXLPCT343	B5a	16014-16569/1-870	111A 140 187 189 207 256 266G 519	73 93 210 263 315+C 523-524d 709 750
YXLPCT356	B5a	16050-16569/1-1013	140 183C 189 262 266A 519	64 73 210 263 309+C 315+C 393d 523-524d 593 709 750
YXLPCT366	B5a	16032-16569/1-801	182C 183C 189 266A 519	73 210 263 309+CC 315+C 523-524d 709 750
YXLPCT377	B5a	16060-16569/1-860	140 182C 183C 189 261 266A 519	73 152 210 263 315+C 523-524d 709 750
YXLPCT383	B5a	16062-16569/1-831	140 183C 189 266A 519	73 210 263 315+C 523-524d 709 750
YXLPCT449	B5a	16022-16569/1-870	140 183C 189 262 266A 519	64 73 210 263 309+C 315+C 523-524d 593 709 750
YXLPCT484	B5a	16043-16569/1-1042	92 129 140 182C 183C 189 266A 519	73 210 263 309+CC 315+C 523-524d 709 750
YXLPCT496	B5a	16032-16569/1-913	140 183C 189 266A 519	73 210 263 315+C 523-524d 593 709 750
YXLPCT532	B5a	16051-16569/1-730	140 183C 189 266A 519	73 210 263 309+CC 315+C 523-524d 709
YXLPCT550	B5a	16035-16569/1-961	140 183C 189 234 266A 519	73 210 263 309+C 315+C 523-524d 709 750
YXLPCT551	B5a	16024-16569/1-908	140 182C 183C 189 250 261 266A 519	73 152 210 263 309+CC 315+C 523-524d 709 750
YXLPCT569	B5a	16046-16569/1-918	140 189 266A 316 519	73 146 210 263 309+C 315+C 523-524d 709 750
YXLPCT610	B5a	16031-16569/1-906	140 183C 189 266A 519	73 210 263 315+C 523-524d 709 750
YXLPCT708	B5a	16034-16569/1-897	140 183C 189 266A 519	73 146 210 263 309+3C 315+C 523-524d 709 750
YXLPCT713	B5a	16035-16569/1-916	140 182C 183C 189 261 266A 519	73 152 210 263 309+CC 315+C 523-524d 709 750
YXLPCT717	B5a	16038-16569/1-915	140 183C 189 262 266A 519	64 73 81 210 263 309+CC 315+C 523-524d 593 709 750
YXLPCT718	B5a	16017-16569/1-906	140 182C 183C 189 266A 362 519	73 210 263 309+CC 315+C 511 523-524d 709 750
YXLPCT725	B5a	16021-16569/1-910	140 182C 183C 189 266A 519	73 210 263 309+CC 315+C 511 523-524d 709 750
YXLPCT796	B5a	16013-16569/1-870	140 182C 183C 189 259 261 266A 519	73 152 210 263 309+3C 315+C 523-524d 709 750
YXLPCT834	B5a	16038-16569/1-809	140 183C 189 266A 519	26 73 210 263 315+C 523-524d 709 750

YXLPCT240	B5a2	16053-16569/1-870	140 187 189A 193+C 256 266G 519	73 93 210 263 309+C 315+C 523-524d 709 750
YXLPCT075	B5b	16039-16569/1-870	140 183C 189 213 243 318T 519	73 103 200 263 315+C 709 750
YXLPCT272	B5b	16032-16569/1-870	140 182C 183C 189 243 519	73 103 146 199 204 263 315+C 523-524d 709 750
YXLPCT337	B5b	16026-16569/1-870	140 182C 183C 189 243 293C 519	73 103 204 263 315+C 523-524d 709 750
YXLPCT347	B5b	16031-16569/1-870	111 140 183C 189 232 242 243 463 519	73 103 131 263 309+C 315+C 347d 523-524d 709 750
YXLPCT409	B5b	16039-16569/1-912	140 166 182C 183C 189 243 519	73 103 263 309+C 523-524d 709 750
YXLPCT493	B5b	16012-16569/1-1017	140 182C 183C 189 243 293C 519	73 103 204 263 315+C 523-524d 709 750
YXLPCT612	B5b	16013-16569/1-806	140 182C 183C 189 243 519	73 103 204 263 309+CC 315+C 357 523-524d 709 750
YXLPCT647	B5b	16023-16569/1-903	93 140 183C 189 243 355 519	73 103 150 263 315+C 523-524d 709 750
YXLPCT183	B5b2a'b	16016-16569/1-870	111 140 182C 183C 189 234 243 463 519	73 131 195 204 263 315+C 523-524d 709 750
YXLPCT026	C	16020-16569/1-799	223 298 327 362 519	73 249d 263 309+C 315+C 489 750
YXLPCT040	C	16014-16569/1-911	223 298 327 344 519	73 146 189 249d 263 315+C 489 750
YXLPCT061	C	16056-16569/1-803	189 223 298 327 519	73 189 207 249d 263 315+C 489 750
YXLPCT081	C	16025-16569/1-898	223 298 327 519	73 249d 263 309+CC 315+C 489 750
YXLPCT105	C	16034-16569/1-838	86 104 223 298 319 327	73 249d 263 315+C 489 750
YXLPCT175	C	16085-16569/1-900	223 298 327 519	73 249d 263 309+C 315+C 489 750
YXLPCT176	C	16012-16569/1-783	223 298 327 362 519	73 249d 263 315+C 489 750
YXLPCT199	C	16017-16569/1-870	183C 189 223 261 298 327 519	73 249d 263 309+CC 315+C 489 750
YXLPCT248	C	16032-16569/1-870	189 223 298 327 355 519	73 249d 263 309+C 315+C 489 750
YXLPCT253	C	16033-16569/1-870	223 298 327 519	73 249d 263 309+C 315+C 489 750
YXLPCT301	C	16075-16569/1-842	223 298 327 359 519	73 249d 263 309+C 315+C 460 463+C 489 750
YXLPCT325	C	16018-16569/1-870	223 298 327 519	73 146 249d 263 315+C 489 750
YXLPCT327	C	16019-16569/1-846	223 298 327 519	73 249d 263 309+C 315+C 460 489 750
YXLPCT338	C	16051-16569/1-822	189 223 298 327 519	73 249d 263 309+C 315+C 489 750
YXLPCT363	C	16031-16569/1-870	189 223 298 327 519	73 249d 263 309+CC 315+C 489 750
YXLPCT364	C	16031-16569/1-870	223 298 327 519	73 249d 263 309+CC 315+C 489 750
YXLPCT392	C	16028-16569/1-891	93 223 266 298 311 327 519	73 152 249d 263 315+C 489 750
YXLPCT440	C	16038-16569/1-870	223 298 325 327 399 519	73 249d 263 315+C 489 750
YXLPCT451	C	16040-16569/1-870	223 298 325 327 399 519	73 249d 263 309+C 315+C 489 750
YXLPCT454	C	16041-16569/1-870	223 298 327 362 519	73 249d 263 315+C 489 750
YXLPCT456	C	16028-16569/1-790	223 298 327 519	73 146 215 249d 263 315+CC 489 750
YXLPCT475	C	16056-16569/1-769	223 298 327 330 519	73 249d 263 315+C 523-524d 489 750
YXLPCT476	C	16018-16569/1-870	150 223 298 318 327 357 519	73 195 249d 263 309+CC 315+C 347d 489 634 750
YXLPCT477	C	16023-16569/1-870	223 298 327	73 249d 263 309+C 315+C 489 523-524d 750
YXLPCT526	C	16045-16569/1-944	223 298 327 519	73 146 215 249d 263 315+C 489 750
YXLPCT527	C	16020-16569/1-870	223 298 327 519	73 146 215 249d 263 315+C 489 750

YXLPCT571	C	16057-16569/1-870	223 298 327 519	73 146 249d 263 309+C 315+C 489 750	
YXLPCT580	C	16017-16569/1-870	223 298 327	73 249d 263 309+C 315+C 489 523-524d 750	
YXLPCT587	C	16057-16569/1-870	183C 189 223 261 298 327 519	73 146 249d 263 309+CC 315+C 489 750	
YXLPCT619	C	16022-16569/1-883	148 223 288 298 327 519	73 249d 263 309+C 315+C 489 595+C 750	
YXLPCT663	C	16049-16569/1-870	223 298 327 519	73 249d 263 309+CC 315+C 489 750	
YXLPCT664	C	16034-16569/1-870	117 129 192 223 298 327 357 519	73 249d 263 315+C 489 750	
YXLPCT712	C	16050-16569/1-904	183C 189 223 298 327 519	73 249d 263 309+CC 315+C 489 750	
YXLPCT714	C	16022-16569/1-858	223 297 298 327 519	73 249d 263 309+CC 315+C 489 750	
YXLPCT735	C	16017-16569/1-870	129 183C 189 223 261 298 327 519	73 249d 263 309+C 315+C 489 750	
YXLPCT754	C	16049-16569/1-870	223 298 327 519	73 249d 263 309+C 315+C 489 750	
YXLPCT801	C	16032-16569/1-870	223 298 325 327 399 519	73 249d 263 309+C 315+C 489 750	
YXLPCT842	C	16046-16569/1-885	223 298 327 519	73 249d 263 309+C 315+C 489 750	
YXLPCT685	C4a1b'd	16043-16569/1-870	129 150 223 298 327 519	73 195 249d 263 489 750	
YXLPCT131	C4a4	16048-16569/1-870	223 298 327 354 357 519	47 73 249d 263 309+C 315+C 489 523-524d 750	
YXLPCT264	C4a4	16008-16569/1-870	223 298 327 354 357 519	47 54 73 249d 263 309+C 315+C 489 523-524d 750	
YXLPCT276	C4a4	16033-16569/1-870	223 298 327 354 357 519	47 73 249d 263 309+C 315+C 489 523-524d 750	
YXLPCT529	C4a4	16030-16569/1-870	86 223 298 354 357 519	47 73 249d 263 309+C 315+C 489 523-524d 750	
YXLPCT568	C4a4	16051-16569/1-870	223 298 327 354 357 519	47 73 249d 263 309+CC 315+C 489 523-524d 750	
YXLPCT595	C5	16052-16569/1-870	148 223 288 298 327 519	73 249d 263 309+C 315+C 489 595+C 750	
YXLPCT035	CZ	16039-16569/1-855	136 223 298 527	73 152 249d 263 309+C 315+C 489 750	
YXLPCT388	CZ	16032-16569/1-870	93 129 209 223 272 298 519	73 146 152 225 249d 263 309+C 315+C 316 454 489 523-524d 750	
YXLPCT519	CZ	16026-16569/1-907	75 189 223 298 519	73 249d 263 309+C 315+C 489 750	
YXLPCT007	D4	16033-16569/1-902	223 265C 299 327 362	73 263 315+C 489 750	-
YXLPCT013	D4	16033-16569/1-870	223 362 519	73 152 199 263 279 315+C 489 750 813	-
YXLPCT020	D4	16024-16569/1-870	93 223 362 519	73 200 263 315+C 489 523-524d 629 750	-
YXLPCT028	D4	16031-16569/1-870	223 294 362	73 146 263 315+C 489 750	-
YXLPCT033	D4	16078-16569/1-870	223 362	73 150 194 263 315+C 489 750	-
YXLPCT057	D4	16042-16569/1-913	223 362 519	73 263 315+C 489 523-524d 750	-
YXLPCT068	D4	16055-16569/1-884	184 223 311 362	73 263 315+C 489 750	-
YXLPCT070	D4	16039-16569/1-893	223 249 362	73 263 309+C 315+C 489 750	-
YXLPCT072	D4	16072-16569/1-863	223 311 362	73 195 263 315+C 489 750	-
YXLPCT083	D4	16022-16569/1-870	223 249 362	73 263 309+C 315+C 489 750	-
YXLPCT084	D4	16069-16569/1-911	92 223 362	73 94 263 309+C 315+C 489 750	-
YXLPCT101	D4	16032-16569/1-870	223 256 284 311 362 519	73 200 263 315+C 489 750	-
YXLPCT103	D4	16018-16569/1-870	184 223 311 362	73 263 309+CC 315+C 338 489 750	-
YXLPCT107	D4	16032-16569/1-870	172 223 362	73 185 263 315+C 489 750	-

YXLPCT111	D4	16028-16569/1-870	86 223 362	73 263 315+C 489 750	-
YXLPCT114	D4	16033-16569/1-870	223 362 519	73 194 263 315+C 489 523-524d 723 750	-
YXLPCT122	D4	16022-16569/1-870	86 223 362	73 263 315+C 489 750	-
YXLPCT145	D4	16072-16569/1-870	223 362	73 199 263 309+C 315+C 489 750 813	-
YXLPCT158	D4	16019-16569/1-900	223 362 519	73 263 315+C 489 523-524d 750	-
YXLPCT179	D4	16048-16569/1-849	92 223 362	73 94 263 315+C 489 750	-
YXLPCT191	D4	16020-16569/1-783	201 223 362	73 152 263 309+C 315+C 489 750	-
YXLPCT197	D4	16037-16569/1-881	201 223 362	73 152 263 309+C 315+C 489 750	-
YXLPCT206	D4	16075-16569/1-870	86 223 271 362	73 263 309+C 315+C 489 750	-
YXLPCT213	D4	16057-16569/1-870	188d 223 362 519	73 194 205 263 315+C 489 523-524d 750 770Y	-
YXLPCT233	D4	16099-16569/1-841	223 362	73 94 263 315+C 489 750	-
YXLPCT238	D4	16040-16569/1-780	223 362	73 207 263 309+C 315+C 489 750	-
YXLPCT255	D4	16041-16569/1-865	192 223 316 362	73 183 184 263 309+C 315+C 489 750	-
YXLPCT355	D4	16025-16569/1-870	86 223 362	73 263 315+C 489 750	-
YXLPCT368	D4	16031-16569/1-870	92 223 362	73 94 152 263 309+C 315+C 489 750	-
YXLPCT369	D4	16034-16569/1-838	86 223 271 362	73 263 309+C 315+C 489 750	-
YXLPCT372	D4	16026-16569/1-789	223 256 311 362 519	73 200 263 315+C 489 750	-
YXLPCT385	D4	16021-16569/1-870	189 223 362	73 263 309+C 315+C 488 489 750	-
YXLPCT393	D4	16046-16569/1-823	223 362 519	73 152 199 263 279 315+C 489 750 813	-
YXLPCT399	D4	16039-16569/1-876	223 362 519	73 263 309+C 315+C 489 750	-
YXLPCT417	D4	16014-16569/1-782	223 249 362	73 263 309+C 315+C 489 750	-
YXLPCT422	D4	16045-16569/1-889	95 183C 189 223 259A 295 362	73 195 263 315+C 489 750	-
YXLPCT431	D4	16024-16569/1-870	223 362	73 263 315+C 489 750	-
YXLPCT432	D4	16034-16569/1-849	129 223 249 311 362	73 152 263 315+C 489 750	-
YXLPCT435	D4	16024-16569/1-870	93 223 362	73 152 263 309+C 315+C 489 750	-
YXLPCT442	D4	16021-16569/1-870	223 294 362	65A 73 195 237 263 315+C 489 501 750	-
YXLPCT459	D4	16022-16569/1-870	223 256 311 362 519	73 200 263 315+C 489 750	-
YXLPCT499	D4	16030-16569/1-973	223 249 362	73 228 263 309+C 315+C 489 750	-
YXLPCT509	D4	16018-16569/1-1000	223 256 311 362 519	73 263 309+CC 315+C 489 750	-
YXLPCT511	D4	16032-16569/1-947	223 362 519	73 194 263 315+C 489 523-524d 750	-
YXLPCT514	D4	16019-16569/1-971	185 189d 223 232A 319 362	73 263 315+C 489 523-524d 750	-
YXLPCT515	D4	16023-16569/1-1015	223 359 362	73 263 315+C 489 750	-
YXLPCT518	D4	16033-16569/1-913	223 362	73 152 186 263 309+C 315+C 489 750	-
YXLPCT520	D4	16059-16569/1-870	223 362 519	73 194 263 315+C 489 523-524d 750	-
YXLPCT524	D4	16018-16569/1-899	86 223 362	73 263 315+C 489 750	-
YXLPCT530	D4	16026-16569/1-870	223 362 519	73 194 263 315+C 489 750	-

YXLPCT536	D4	16040-16569/1-870	223 362 519	73 152 199 263 279 315+C 489 750 813	-
YXLPCT539	D4	16017-16569/1-840	223 249 362	73 263 309+C 315+C 489 750	-
YXLPCT543	D4	16015-16569/1-870	42 93 150 214 223 362	73 263 309+C 315+C 489 750	-
YXLPCT547	D4	16078-16569/1-876	140 223 362 519	73 152 263 298 315+C 489 750	-
YXLPCT555	D4	16047-16569/1-915	223 362	73 263 309+C 315+C 489 750	-
YXLPCT557	D4	16054-16569/1-893	223 274 291 362	73 263 309+CC 315+C 489 750	-
YXLPCT579	D4	16049-16569/1-870	201 223 362	73 152 263 309+C 315+C 489 750	-
YXLPCT586	D4	16024-16569/1-805	223 356 362	73 263 309+C 315+C 489 750	-
YXLPCT607	D4	16046-16569/1-806	172 223 362	73 185 263 315+C 489 750	-
YXLPCT623	D4	16032-16569/1-870	201 223 362	73 152 263 309+C 315+C 489 750	-
YXLPCT629	D4	16033-16569/1-835	223 256 311 362 519	73 200 263 315+C 489 750	-
YXLPCT648	D4	16039-16569/1-884	172 362 519	73 194 263 315+C 489 523-524d 750	-
YXLPCT657	D4	16057-16569/1-870	172 362 519	73 194 263 315+C 489 523-524d 750	-
YXLPCT669	D4	16035-16569/1-870	111 189 223 287 291A 362 519	73 263 309+C 315+C 489 523-524d 750	-
YXLPCT677	D4	16043-16569/1-870	223 271 319 362 526	73 151 263 309+C 315+C 483 489 523-524d	-
YXLPCT696	D4	16055-16569/1-947	223 362 519	73 150 194 263 315+C 489 523-524d 750	-
YXLPCT701	D4	16063-16569/1-757	172 223 362 519	73 150 152 263 309+C 315+C 374 489 523-524d 750	-
YXLPCT705	D4	16033-16569/1-870	223 362	73 94 263 309+C 315+C 489 517 750	-
YXLPCT729	D4	16036-16569/1-870	51 192 223	73 263 315+C 489 709 750	-
YXLPCT753	D4	16022-16569/1-783	192 223 316 362	73 263 315+C 489 750	-
YXLPCT758	D4	16080-16569/1-870	223 249 362	73 263 309+CC 315+C 489 735 750	-
YXLPCT763	D4	16013-16569/1-1000	172 223 274 362	73 263 298 309+C 315+C 459d 466 489 750	-
YXLPCT764	D4	16065-16569/1-870	92 223 362	73 94 204 207 263 315+C 489 508 750	-
YXLPCT767	D4	16017-16569/1-961	223 362 519	73 194 263 309+C 315+C 489 523-524d 750	-
YXLPCT774	D4	16016-16569/1-1000	223 362	73 152 263 309+C 315+C 489 750	-
YXLPCT778	D4	16028-16569/1-870	183C 189 223 274 362 519	73 263 298 310d 316 347d 489 750	-
YXLPCT786	D4	16013-16569/1-865	92 223 362	73 263 315+C 489 750	-
YXLPCT790	D4	16014-16569/1-842	111 263 362	73 200 263 315+C 489 523-524+AC 750 769	-
YXLPCT792	D4	16047-16569/1-870	179G 183C 189 223 274 311 362 519	73 146 263 298 310 315d 316 489 750	-
YXLPCT804	D4	16042-16569/1-862	111 223 362	73 200 263 315+C 489 523-524d 750 769	-
YXLPCT817	D4	16022-16569/1-800	86 168 223 360 362	73 195 263 315+C 489 750	-
YXLPCT825	D4	16018-16569/1-806	111 223 362	73 200 263 315+C 489 523-524d 750 769	-
YXLPCT838	D4	16051-16569/1-943	86 223 294 362	73 263 315+C 489 750	-
YXLPCT846	D4	16045-16569/1-963	102 223 295 362 399 519	73 263 315+C 489 523-524d 595+A 750	-
YXLPCT849	D4	16052-16569/1-870	223 362	73 234 249d 263 309+C 315+C 489 750	-
YXLPCT341	D4a	16022-16569/1-870	129 223 362	73 152 263 309+C 315+C 489 750	-

YXLPCT483	D4a	16013-16569/1-874	129 249 362	73 152 228T 263 309+CC 315+C 489 750	-
YXLPCT487	D4a	16045-16569/1-971	129 223 362 519	73 152 194 263 309+C 315+C 489 750	-
YXLPCT521	D4a	16050-16569/1-838	129 223 263 362	73 152 263 315+C 489 750	-
YXLPCT534	D4a	16039-16569/1-870	93 129 223 362 519	73 152 217 263 309+C 315+C 489 750	-
YXLPCT584	D4a	16032-16569/1-870	129 223 362 519	73 152 217 263 315+C 489 750	-
YXLPCT670	D4a	16038-16569/1-870	129 223 362 519	73 152 263 315+C 489 750	-
YXLPCT465	D4a1d	16033-16569/1-870	129 223 286 325 362	73 143 152 195 263 309+C 315+C 489 750	
YXLPCT583	D4b1a1	16022-16569/1-870	93 223 239 243 319 362	73 152 263 309+C 315+C 489 523-524d 750	
YXLPCT376	D4b1b	16033-16569/1-784	223 287 319 362 390 519	73 263 309+C 315+C 431 489 523-524d 750	
YXLPCT835	D4c	16041-16569/1-971	93 223 245 362	73 263 309+C 315+C 489 534 750	-
YXLPCT316	D4e1a1	16021-16569/1-870	93 176 223 311 362	73 94 263 309+C 315+C 489 750	
YXLPCT396	D4i	16034-16569/1-884	223 294 299 362 519	73 146 263 309+C 315+C 380 489 750	-
YXLPCT628	D4j2	16042-16569/1-870	223 291 362	73 150 152 263 315+C 489 523-524d 750 789	
YXLPCT682	D4j3	16019-16569/1-916	129 184 223 311 362	73 199 263 309+C 315+C 338 489 750	
YXLPCT149	D5a	16019-16569/1-894	172 182C 183C 189 223 362	73 150 263 309+C 315+C 489 523-524d 750 752	
YXLPCT171	D5a	16069-16569/1-760	172 182C 183C 189 223 362	73 150 153 207 263 309+C 315+C 489 523-524d 750 752	
YXLPCT378	D5a	16031-16569/1-870	172 182C 183C 189 223 362	73 150 207 263 309+CC 315+C 489 523-524d 750 752	
YXLPCT507	D5a	16016-16569/1-954	172 182C 183C 189 223 362	73 150 263 309+CC 315+C 489 523-524d 735 750 752	
YXLPCT513	D5a	16027-16569/1-819	93 111 182C 183C 189 223 360 362	73 150 263 309+C 315+C 489 523-524d 750 752	
YXLPCT769	D5a	16024-16569/1-970	93 111 182C 183C 189 223 360 362 519	73 150 263 309+C 315+C 489 523-524d 750 752	
YXLPCT424	D5a2	16031-16569/1-870	164 182C 183C 189 223 266 362	73 150 152 263 315+C 489 523-524d 750 752	
YXLPCT479	D5a2	16037-16569/1-1000	164 182C 183C 189 223 266 362	73 150 207 263 309+C 315+C 489 523-524d 750 752	
YXLPCT130	D5a2a	16050-16569/1-870	92 164 172 182C 183C 189 223 266 362	73 150 263 315+C 489 523-524d 750 752	
YXLPCT275	D5a2a	16041-16569/1-870	93 164 172 182C 183C 189 223 234 266 311 362	16T 73 146 150 195 263 315+C 489 523-524d 750 752	
YXLPCT284	D5a2a	16032-16569/1-870	93 164 172 182C 183C 189 223 234 266 311 362	16T 73 146 150 195 263 315+C 489 523-524d 750 752	
YXLPCT318	D5a2a	16035-16569/1-870	92 164 172 182C 183C 189 223 243 266 362	73 150 263 309+C 315+C 489 523-524d 750 752	
YXLPCT390	D5a2a	16039-16569/1-870	164 172 182C 183C 189 223 266 362	73 150 263 309+CC 315+C 489 523-524d 750 752	
YXLPCT572	D5a2a	16033-16569/1-870	92 103 164 172 182C 183C 189 223 243 266 362	73 146 150 263 315+C 489 523-524d 750 752	
YXLPCT667	D5a2a	16017-16569/1-870	92 164 172 182C 183C 189 223 243 247 266 362	73 150 263 315+C 489 523-524d 750 752	
YXLPCT445	D5a3	16035-16569/1-870	182C 183C 189 360 362	73 150 263 309+CC 315+C 489 750 752	
YXLPCT009	D5b	16029-16569/1-920	51 183C 189 223 320 362 390	73 146 150 151 152 263 309+C 315+C 489 750	
YXLPCT203	D5b	16041-16569/1-870	183C 189 217 223 319 362 519	73 150 189 263 315+C 456 489 681 750	
YXLPCT245	D5b	16017-16569/1-870	189 223 362 519	73 150 263 315+C 456 489 534+AC 681 750	
YXLPCT283	D5b	16032-16569/1-870	183C 189 223 288 362 519	73 150 189 263 309+CC 315+C 456 489 545 681 750	
YXLPCT297	D5b	16035-16569/1-870	188 189 193+CC 223 234 311 362	73 150 151 152 263 310 489 750	
YXLPCT307	D5b	16013-16569/1-870	172 183C 189 362	73 150 204 263 309+CC 315+C 456 489 681 750	

YXLPCT361	D5b	16032-16569/1-870	189 223 362	73 150 152 195 263 309+C 315+C 489 709 750
YXLPCT382	D5b	16043-16569/1-870	189 223 233 362 519	73 150 152 185 263 309+C 315+C 456 489 523-524d 681 750
YXLPCT391	D5b	16021-16569/1-799	189 223 362 519	73 150 309+C 315+C 456 489 681 750
YXLPCT414	D5b	16016-16569/1-969	148 182C 183C 189 223 362 368 519	73 150 152 185 263 309+C 315+C 456 489 523-524d 681 750
YXLPCT581	D5b	16018-16569/1-870	189 223 362 519	73 150 263 315+C 456 489 681 750
YXLPCT675	D5b	16039-16569/1-870	189 223 362 519	73 150 152 185 263 309+C 315+C 456 489 523-524d 681 750
YXLPCT168	F*	16038-16569/1-870	182C 183C 189 243 304 311 519	73 249d 263 309+C 315+C 523-524d 750
YXLPCT256	F*	16065-16569/1-870	304	73 249d 263 315+CC 315+C 750
YXLPCT508	F*	16072-16569/1-1017	153 172 304 362 519	73 214 249d 263 315+C 523-524d 750
YXLPCT522	F*	16016-16569/1-907	304	73 249d 263 309+C 315+C 750
YXLPCT658	F*	16022-16569/1-894	93 291 304 519	73 249d 263 309+C 315+C 750
YXLPCT683	F*	16049-16569/1-915	362	73 235 249d 263 315+C 750
YXLPCT732	F*	16018-16569/1-870	172 304 519	73 249d 263 315+C 523-524d 750
YXLPCT044	F1	16034-16569/1-906	183c 189 304 519	73 249d 263 315+C 523-524d 750
YXLPCT138	F1	16018-16569/1-870	183C 189 304 519	73 249d 263 309+C 315+C 494A 523-524d 750
YXLPCT139	F1	16018-16569/1-870	183C 189 304 519	73 249d 263 309+C 315+C 494A 523-524d 750
YXLPCT142	F1	16029-16569/1-870	183C 189 304 519	73 249d 263 309+C 315+C 494A 523-524d 750
YXLPCT157	F1	16038-16569/1-896	183C 189 304	73 249d 263 309+CC 315+C 494A 523-524d 750
YXLPCT205	F1	16021-16569/1-806	183C 189 304 519	73 249d 263 309+CC 315+C 523-524d 750
YXLPCT246	F1	16043-16569/1-870	183C 189 243 304 519	73 185C 249d 263 309+C 315+C 750
YXLPCT290	F1	16039-16569/1-870	92 126 183C 189 304 390 519	73 195 249d 263 309+C 315+C 523-524d 750
YXLPCT410	F1	16033-16569/1-789	183C 189 234 242 304 519	73 195 249d 263 309+C 315+C 523-524d 750
YXLPCT444	F1	16031-16569/1-870	189 304 519	73 146 249d 263 309+C 315+C 523-524d 750
YXLPCT533	F1	16032-16569/1-968	183C 189 304 519	73 249d 263 315+C 523-524d 750
YXLPCT574	F1	16038-16569/1-870	182C 183C 189 304 519	73 152 249d 263 309+CC 315+C 523-524d 750
YXLPCT625	F1	16020-16569/1-894	182C 183C 189 304 519	73 152 249d 263 309+CC 315+C 523-524d 750
YXLPCT649	F1	16016-16569/1-891	172 189 304 519	73 146 152 249d 263 315+C 486 523-524d 750
YXLPCT660	F1	16035-16569/1-870	183C 189 304 519	73 249d 263 315+C 523-524d 750
YXLPCT673	F1	16018-16569/1-870	179 183C 189 304 519	73 146 249d 263 315+C 523-524d 750
YXLPCT736	F1	16045-16569/1-870	51 183C 189 269 292 300 304 311 519	73 150 249d 263 309+CC 315+C 523-524d 750
YXLPCT828	F1	16018-16569/1-954	93 189 304 519	73 146 249d 263 309+CC 315+C 523-524d 650Y 750
YXLPCT008	F1a	16022-16569/1-870	129 172 304 519	73 249d 263 315+C 520-524d 750
YXLPCT039	F1a	16064-16569/1-903	129 172 304 519	73 249d 263 315+C 523-524d 750
YXLPCT060	F1a	16025-16569/1-912	129 172 304 519	73 249d 263 309+C 315+C 523-524d 750
YXLPCT098	F1a	16048-16569/1-870	129 172 304 519	73 249d 263 309+CC 315+C 523-524d 750
YXLPCT099	F1a	16034-16569/1-870	129 172 304 519	73 189 207 249d 260 263 309+C 315+C 523-524d 750

YXLPCT156	F1a	16034-16569/1-806	129 172 304 519	73 249d 263 315+C 523-524d 750
YXLPCT177	F1a	16083-16569/1-798	129 172 304 519	73 249d 263 309+C 315+C 523-524d 750
YXLPCT228	F1a	16031-16569/1-870	86 129 172 304 519	73 249d 263 315+C 523-524d 750
YXLPCT266	F1a	16019-16569/1-906	129 172 304 320 519	73 249d 263 315+C 523-524d 750
YXLPCT306	F1a	16025-16569/1-911	129 172 304 519	73 249d 263 315+C 523-524d 750
YXLPCT317	F1a	16031-16569/1-895	129 172 304 519	73 249d 263 315+C 523-524d 750
YXLPCT412	F1a	16022-16569/1-870	129 172 304 519	73 249d 263 309+C 315+C 523-524d 750
YXLPCT468	F1a	16026-16569/1-870	166 172 183C 189 304 519	73 146 249d 263 309+C 315+C 523-524d 750
YXLPCT492	F1a	16013-16569/1-946	129 172 278 304 519	73 249d 263 315+C 523-524d 750
YXLPCT549	F1a	16026-16569/1-870	129 172 304 519	73 249d 263 309+C 315+C 523-524d 750
YXLPCT666	F1a	16042-16569/1-870	129 172 304 519	73 200 249d 263 309+C 315+C 523-524d 750
YXLPCT695	F1a	16028-16569/1-870	129 172 304 319 519	73 249d 263 315+C 523-524d 750
YXLPCT749	F1a	16021-16569/1-895	92 129 172 304 519	53 54T 73 249d 263 309+C 315+C 318 523-524d 750
YXLPCT776	F1a	16018-16569/1-963	129 172 304 519	73 249d 263 309+C 315+C 523-524d 750
YXLPCT777	F1a	16016-16569/1-870	129 172 304 519 527	73 249d 263 315+C 523-524d 750
YXLPCT805	F1a	16027-16569/1-945	129 172 304 519	73 249d 263 315+C 523-524d 750
YXLPCT841	F1a	16043-16569/1-1014	129 172 304 519	73 249d 263 309+C 315+C 523-524d 750
YXLPCT018	F1a1	16022-16569/1-870	129 162 172 264 304 519	73 152 249d 263 309+C 315+C 523-524d 548 750
YXLPCT027	F1a1	16022-16569/1-870	129 162 172 304	73 249d 263 315+C 523-524d 548 750
YXLPCT082	F1a1	16062-16569/1-919	129 162 172 304 399 519	73 249d 263 315+C 523-524d 750
YXLPCT144	F1a1	16056-16569/1-870	129 162 172 304 399 519	73 249d 263 309+C 315+C 523-524d 750
YXLPCT155	F1a1	16020-16569/1-870	129 162 172 304	73 249d 263 315+C 523-524d 548 750
YXLPCT204	F1a1	16047-16569/1-901	129 162 172 304 519	73 249d 263 309+C 315+C 523-524d 548 750
YXLPCT212	F1a1	16066-16569/1-814	129 162 172 304	73 249d 263 315+C 523-524d 548 573+CCC 750
YXLPCT242	F1a1	16032-16569/1-870	129 162 172 183C 189 193+C 304 519	73 249d 263 309+CC 315+C 523-524d 750
YXLPCT260	F1a1	16031-16569/1-870	129 162 172 304 519	73 249d 263 309+C 315+C 466G 523-524d 548 750
YXLPCT298	F1a1	16056-16569/1-870	129 162 172 304 311 519	73 152 249d 263 309+C 477 523-524d 750
YXLPCT300	F1a1	16058-16569/1-870	129 162 172 304 399 519	73 199 249d 263 309+CC 315+C 523-524d 750
YXLPCT302	F1a1	16017-16569/1-870	129 162 172 304 399 519	73 249d 263 315+C 523-524d 750
YXLPCT312	F1a1	16014-16569/1-870	129 162 172 304 519	73 195 249d 263 315+C 523-524d 593 750
YXLPCT380	F1a1	16036-16569/1-870	129 162 172 222 304 519	73 249d 263 315+C 523-524d 750
YXLPCT407	F1a1	16057-16569/1-804	129 162 172 304 519	73 249d 263 309+C 315+C 523-524d 548 549 750
YXLPCT455	F1a1	16016-16569/1-870	129 162 172 304 519	73 249d 263 315+C 523-524d 548 750
YXLPCT457	F1a1	16039-16569/1-870	129 162 172 304 399 519	73 249d 263 315+C 523-524d 750
YXLPCT540	F1a1	16054-16569/1-870	129 162 172 304 519	73 249d 263 315+C 466G 523-524d 548 750
YXLPCT624	F1a1	16028-16569/1-870	129 162 172 304 519	73 249d 263 309+C 315+C 523-524d 750

YXLPCT719	Fla1	16022-16569/1-870	93 129 162 172 304 519	73 249d 263 315+C 523-524d 750
YXLPCT733	Fla1	16018-16569/1-870	129 162 172 304 519	63 64 73 249d 263 309+C 315+C 523-524d 750
YXLPCT747	Fla1	16043-16569/1-713	129 162 168 172 304 399 519	73 249d 263 315+C 523-524d
YXLPCT760	Fla1	16071-16569/1-870	129 162 172 243 294 304 519	73 249d 263 315+C 523-524d 750
YXLPCT848	Fla1	16030-16569/1-870	162 172 304 519	73 249d 263 315+C 523-524d 548 750
YXLPCT850	Fla1	16021-16569/1-870	93 129 162 172 304 399 519	73 246d 263 309+C 315+C 523-524d 750
YXLPCT022	Fla1a	16016-16569/1-870	108 129 162 172 304 519	73 249d 263 309+ 315+C 523-524d 750
YXLPCT051	Fla1a	16033-16569/1-911	108 129 162 172 304 356 519	73 150 249d 263 309+C 315+C 523-524d 750 794
YXLPCT113	Fla1a	16022-16569/1-870	108 129 162 172 304 354 519	73 249d 263 309+C 315+C 523-524d 750
YXLPCT182	Fla1a	16045-16569/1-870	108 129 162 172 304 519	73 195 249d 263 309+C 315+C 523-524d 750
YXLPCT215	Fla1a	16022-16569/1-773	108 129 162 172 270 304 519	73 249d 263 315+C 523-524d 750
YXLPCT257	Fla1a	16017-16569/1-751	108 129 162 172 293 304 519	73 249d 263 315+C 523-524d 750
YXLPCT333	Fla1a	16021-16569/1-870	108 129 162 172 304 519	73 249d 263 309+C 315+C 523-524d 750
YXLPCT342	Fla1a	16050-16569/1-825	108 129 162 172 304 372A 519	73 152 186 215 249d 263 309+C 315+C 523-524d 750
YXLPCT389	Fla1a	16034-16569/1-789	108 129 162 172 304 519	73 249d 263 309+C 315+C 523-524d 750
YXLPCT467	Fla1a	16053-16569/1-870	108 129 172 304 519	73 249d 263 315+C 523-524d 750
YXLPCT535	Fla1a	16056-16569/1-961	108 129 162 172 304 519	73 249d 263 309+C 315+C 523-524d 750
YXLPCT656	Fla1a	16025-16569/1-870	108 129 162 172 304	73 150 195 249d 263 315+C 523-524d 750
YXLPCT773	Fla1a	16016-16569/1-961	108 129 162 172 304 519	73 249d 263 309+C 315+C 523-524d 750
YXLPCT826	Fla1a	16027-16569/1-763	108 129 162 172 304 354 519	73 249d 263 309+C 315+C 523-524d 750
YXLPCT830	Fla1a	16078-16569/1-970	108 129 162 172 304 519	73 249d 263 309+C 315+C 523-524d 750
YXLPCT831	Fla1a	16016-16569/1-870	108 129 162 172 304 519	73 249d 263 309+C 315+C 523-524d 750
YXLPCT816	Fla1b	16013-16569/1-886	129 162 172 304 519	63 64 73 249d 263 309+CC 315+C 523-524d 750
YXLPCT639	Fla2	16027-16569/1-870	172 304 465 519	73 249d 263 309+C 315+C 520-523d 750
YXLPCT036	Fla3	16033-16569/1-904	129 172 304 311 519	73 249d 263 315+C 523-524d 750
YXLPCT500	Fla3	16031-16569/1-895	129 172 304 311 519	73 249d 263 315+C 523-524d 750
YXLPCT662	Fla3	16021-16569/1-897	129 172 304 311 519	73 249d 263 315+C 523-524d 750
YXLPCT552	Fla4	16078-16569/1-1012	129 172 294 304 362 519	73 152 249d 263 309+C 315+C 520-523d 750
YXLPCT554	Fla4	16020-16569/1-870	129 172 294 304 362 519	73 152 249d 263 315+C 520-523d 750
YXLPCT025	Fla'c	16051-16569/1-870	111 129 304 519	73 152 234 249d 263 315+C 523-524d 750
YXLPCT062	Fla'c	16033-16569/1-815	86 111 129 304 519	73 152 234 249d 263 315+C 523-524d 750
YXLPCT148	Fla'c	16014-16569/1-903	111 129 304 519	73 152 234R 249d 263 309+CC 315+C 523-524d 750
YXLPCT162	Fla'c	16023-16569/1-869	111 129 266 304 519	73 152 249d 263 315+C 523-524d 750
YXLPCT348	Fla'c	16052-16569/1-863	111 129 304 519	73 152 234 249d 263 315+C 523-524d 750
YXLPCT560	Fla'c	16021-16569/1-870	111 129 266 304 519	73 152 249d 263 309+CC 315+C 523-524d 750
YXLPCT691	Fla'c	16064-16569/1-856	111 129 304 519	73 152 234 249d 263 315+C 523-524d 750

YXLPCT813	F1a'c	16027-16569/1-907	111 129 304 519	73 152 234 249d 263 315+C 750
YXLPCT837	F1a'c	16027-16569/1-999	111 129 266 304 519	73 152 249d 263 315+C 523-524d 750
YXLPCT023	F1b	16032-16569/1-870	183C 189 232A 249 304 311 519	73 249d 252 263 309+CC 315+C 523-524d 750
YXLPCT050	F1b	16033-16569/1-907	183c 189 232A 249 304 311 360 519	73 249d 263 315+C 523-524d 750
YXLPCT110	F1b	16032-16569/1-870	182C 183C 189 232A 304 519	73 249d 263 309+C 315+C 523-524d 750
YXLPCT116	F1b	16022-16569/1-870	183C 189 232A 249 266 304 519	73 152 249d 263 309+C 315+C 523-524d 750
YXLPCT117	F1b	16043-16569/1-870	183C 189 232A 249 266 304 519	73 152 249d 263 309+CC 315+C 523-524d 750
YXLPCT150	F1b	16009-16569/1-866	183C 189 232A 249 304 311	73 249d 263 315+C 523-524d 750
YXLPCT261	F1b	16017-16569/1-868	183C 189 232A 249 304 311	73 249d 263 315+C 523-524d 750
YXLPCT270	F1b	16018-16569/1-904	183C 189 232A 249 304 311 519	73 146 204 207 249d 263 309+C 315+C 523-524d 750
YXLPCT273	F1b	16032-16569/1-869	183C 189 232A 249 304 519	73 150 152 153 249d 263 309+C 315+C 523-524d 750
YXLPCT323	F1b	16029-16569/1-870	183C 189 232A 249 304 311 519	73 146 204 207 249d 263 309+C 315+C 523-524d 750
YXLPCT332	F1b	16020-16569/1-870	182C 183C 189 232A 249 304 311 519	73 249d 263 315+C 523-524d 750
YXLPCT339	F1b	16021-16569/1-870	183C 189 232A 249 304 311	73 249d 263 315+C 523-524d 750
YXLPCT367	F1b	16050-16569/1-882	111 183C 189 232A 249 304 311 519	73 204 249d 263 315+C 523-524d 750
YXLPCT386	F1b	16021-16569/1-870	111 183C 189 232A 249 304 311 519	73 204 249d 263 315+C 523-524d 750
YXLPCT397	F1b	16032-16569/1-908	183C 189 232A 249 304 311	73 234 249d 263 315+C 523-524d 750
YXLPCT421	F1b	16022-16569/1-835	182C 183C 189 232A 249 304 519	73 152 249d 263 315+C 750
YXLPCT558	F1b	16039-16569/1-794	182C 183C 189 232A 249 304 519	73 152 249d 263 308-309d 315+C 523-524d 750
YXLPCT565	F1b	16035-16569/1-903	182C 183C 189 232A 249 304 311 519	73 249d 263 309+CC 315+C 498d 523-524d 750
YXLPCT621	F1b	16013-16569/1-870	93 182C 183C 189 232A 304 519	73 152 249d 263 309+C 315+C 523-524d 573+CC 750
YXLPCT659	F1b	16022-16569/1-870	182C 183C 189 232A 249 304 311 519	73 249d 263 315+C 523-524d 750
YXLPCT694	F1b	16049-16569/1-944	111 183C 189 232A 249 278 304 311 519	73 204 249d 263 315+C 523-524d 750
YXLPCT704	F1b	16036-16569/1-870	183C 189 232A 249 266 304 519	73 152 249d 263 309+CC 315+C 523-524d 750
YXLPCT723	F1b	16016-16569/1-870	183C 189 232A 249 274 304 311 360 519	44+C 73 249d 263 309+CC 315+C 523-524d 750 824
YXLPCT762	F1b	16012-16569/1-870	183C 189 232A 249 304 311 519	73 249d 263 309+C 315+C 523-524d 750
YXLPCT844	F1b	16050-16569/1-954	183C 189 232A 249 304 311 360 519	73 189 195 249d 263 315+C 523-524d 750
YXLPCT400	F1e1	16042-16569/1-835	183C 189 291 304 355	73 249d 263 309+CC 315+C 513 750
YXLPCT121	F2	16040-16569/1-870	92A 291 304	73 249d 263 315+C 523-524d 750
YXLPCT308	F2	16012-16569/1-806	185 266G 291 304 519	73 249d 263 315+C 747 750
YXLPCT357	F2	16032-16569/1-870	185 266A 291 304 519	73 249d 263 315+C 747 750
YXLPCT510	F2	16039-16569/1-1010	185 266G 291 304 519	73 249d 263 315+C 750 1005
YXLPCT097	F2a	16015-16569/1-870	124 167 203 304 318 519	73 249d 263 315+C 750
YXLPCT164	F2a	16013-16569/1-868	86 167 203 304 318 519	73 249d 263 315+C 750
YXLPCT192	F2a	16014-16569/1-870	129 203 291 304	73 200 249d 263 309+CC 315+C 750
YXLPCT201	F2a	16011-16569/1-870	129 203 291 304	73 200 249d 263 309+CC 315+C 750

YXLPCT287	F2a	16013-16569/1-870	167 203 304 318 519	73 249d 263 315+C 750	
YXLPCT404	F2a	16019-16569/1-893	86 167 203 304 318 519	73 249d 263 315+C 750	
YXLPCT458	F2a	16016-16569/1-870	203 291 304 311 335 519	73 249d 263 309+C 315+C 750	
YXLPCT611	F2a	16049-16569/1-870	86 167 203 304 318 519	73 249d 263 315+C 750	
YXLPCT728	F2a	16032-16569/1-870	124 167 203 304 318 519	73 249d 263 315+C 750	
YXLPCT782	F2a	16034-16569/1-870	86 167 203 304 318 519	73 249d 263 315+C 750	
YXLPCT034	F3a	16043-16569/1-843	260 298 355 362	73 204 207 249d 263 309+C 315+C 573+C 709 750	
YXLPCT173	F3a	16045-16569/1-871	260 298 355 362 526	73 207 249d 263 309+C 315+C 709 750	
YXLPCT174	F3a	16071-16569/1-865	93 260 298 355 362	73 207 249d 263 309+C 315+C 709 750	
YXLPCT189	F3a	16020-16569/1-870	93 260 298 355 362	73 207 249d 263 309+C 315+C 709 750	
YXLPCT652	F3a	16052-16569/1-871	93 260 298 355 362	73 195 207 249d 263 309+CC 315+C 523-524d 709 750	
YXLPCT746	F3a	16042-16569/1-820	260 298 355 362	73 207 249d 263 309+C 315+C 709 750	
YXLPCT832	F3a	16051-16569/1-894	260 298 355 362	73 204 207 249d 263 309+C 315+C 709 750	
YXLPCT079	F3b1	16033-16569/1-870	220C 227 298 362	73 152 249d 263 305+C 315+C 750	
YXLPCT740	F4a	16034-16569/1-870	207 304 399	73 146 152 249d 263 281 309+C 315+C 750	
YXLPCT241	F4b	16018-16569/1-816	218 304	73 249d 263 309+CC 315+C 573+CCCC 750	
YXLPCT053	G	16052-16569/1-898	223 294 362	73 183 263 309+C 315+C 489 709 750	+
YXLPCT194	G	16038-16569/1-870	223 362	73 152 263 309+C 315+C 489 709 750	+
YXLPCT237	G	16085-16569/1-838	223 294 362	73 85 183 193 263 309+C 315+C 489 709 750	+
YXLPCT265	G	16026-16569/1-870	172 223 362	73 309+C 315+C 489 709 750	+
YXLPCT289	G	16022-16569/1-870	172 223 362	73 309+C 315+C 489 709 750	+
YXLPCT353	G	16032-16569/1-870	223 294 362	73 183 186 263 309+C 315+C 489 709 750	+
YXLPCT591	G	16018-16569/1-870	223 362	73 243 263 309+C 315+C 489 709 750	+
YXLPCT613	G	16016-16569/1-870	223 294 362	73 183 263 309+C 315+C 489 709 750	+
YXLPCT715	G	16014-16569/1-768	223 311 362	73 152 263 309+C 315+C 489 709 750	+
YXLPCT768	G	16017-16569/1-954	223 227 278 362 527	73 146 263 283 309+C 315+C 489 709 750	+
YXLPCT137	G1c	16022-16569/1-870	223 362 519	73 199 263 315+C 489 593 709 723 750	+
YXLPCT464	G1c	16018-16569/1-782	126 223 362 519	73 263 315+C 489 593 709 750	+
YXLPCT528	G1c	16033-16569/1-919	126 223 362 519	73 263 315+C 489 593 709 750	+
YXLPCT594	G1c	16035-16569/1-902	223 362 519	73 153 263 309+CC 315+C 489 593 709 750	+
YXLPCT745	G1c	16034-16569/1-945	126 223 362 519	73 125G 263 315+C 489 593 709 750	+
YXLPCT766	G1c	16084-16569/1-870	223 311 362 519	73 263 309 310 489 593 709 750	+
YXLPCT808	G1c	16038-16569/1-911	93 223 362 519	73 263 309+C 315+C 489 593 709 723 750	+
YXLPCT165	G2a	16039-16569/1-870	129 223 278 362	73 263 309+CC 315+C 489 709 750	+
YXLPCT324	G2a	16017-16569/1-870	129 223 278 362	73 263 315+C 489 709 750	+
YXLPCT352	G2a	16052-16569/1-898	129 223 278 362	73 263 309+C 315+C 489 709 750	+

YXLPCT359	G2a	16022-16569/1-756	223 278 362	73 152 263 315+C 489 573+CCCCCCC 709 750	+
YXLPCT425	G2a	16033-16569/1-768	193 223 260 278 362	73 260 263 309+C 315+C 489 709 750	
YXLPCT430	G2a	16065-16569/1-958	129 223 278 362	73 263 315+C 489 709 750	+
YXLPCT460	G2a	16041-16569/1-870	129 223 278 292 362 519	52 73 263 309+C 315+C 489 709 750	+
YXLPCT637	G2a	16032-16569/1-894	223 227 274 278 362 519	73 263 309+C 315+C 489 523-524d 709 750	
YXLPCT707	G2a	16029-16569/1-870	129 223 278 292 362 519	52 73 263 309+C 315+C 489 709 750	+
YXLPCT775	G2a	16038-16569/1-954	129 223 278 292 362 519	52 73 263 309+C 315+C 489 709 750	+
YXLPCT788	G2a	16012-16569/1-908	129 223 278 362	73 263 309+C 315+C 489 709 750	+
YXLPCT794	G2a	16014-16569/1-806	129 223 278 362	73 263 315+C 489 709 750	+
YXLPCT799	G2a	16036-16569/1-954	129 223 278 362	73 263 315+C 489 709 750	+
YXLPCT088	G2a1	16015-16569/1-870	223 227 278 362 527	73 146 263 283 309+C 315+C 489 709 750	
YXLPCT163	G2a1	16018-16569/1-908	223 227 278 362 527	73 146 263 283 309+C 315+C 489 709 750	
YXLPCT198	G2a1	16032-16569/1-870	129 223 227 278 362 527	73 146 263 283 309+C 315+C 489 709 750	
YXLPCT288	G2a1	16039-16569/1-870	223 227 278 362 465 527	73 146 263 283 309+C 315+C 489 709 750	
YXLPCT294	G2a1	16031-16569/1-870	223 227 278 362 527	73 146 263 283 309+C 315+C 489 709 750	
YXLPCT305	G2a1	16024-16569/1-901	223 227 239 278 362	73 152 207 263 309+C 315+C 489 523-524d 709 711 750	
YXLPCT322	G2a1	16018-16569/1-870	223 227 278 362 527	73 146 263 283 309+C 315+C 489 709 750	
YXLPCT497	G2a1	16033-16569/1-971	223 227 278 362 527	73 146 263 283 309+C 315+C 489 709 750	
YXLPCT541	G2a1	16033-16569/1-894	223 227 278 362 527	73 146 263 283 309+C 315+C 489 709 750	
YXLPCT604	G2a1	16040-16569/1-870	223 227 278 362	73 309+C 315+C 489 523-524d 709 750	
YXLPCT626	G2a1	16017-16569/1-870	223 227 278 362 527	73 146 263 283 309+C 315+C 489 709 750	
YXLPCT362	G2a3	16091-16569/1-883	183C 189 223 278 362	73 260 263 315+C 489 709 750	
YXLPCT672	G3	16039-16569/1-870	86 223 274 362 519	73 152 259 263 315+C 489 750	+
YXLPCT737	G3	16016-16569/1-959	223 227 274 278 362 519	73 263 309+CC 315+C 489 523-524d 709 750	+
YXLPCT178	G3a	16068-16569/1-886	223 274 360	73 143 234 263 315+C 489 709 750	
YXLPCT274	G3a	16077-16569/1-870	223 274 360	73 143 234 263 315+C 489 709 750	
YXLPCT418	G3a	16014-16569/1-898	86 124 172 223 274 325 362	73 143 263 315+C 489 709 750	
YXLPCT184	G3a1	16049-16569/1-908	215 223 274	16T 73 143 150 263 309+C 315+C 489 709 750	
YXLPCT429	G3a1	16042-16569/1-801	215 223 274	16T 73 143 150 195 309+C 315+C 489 709 750	
YXLPCT807	G3a1	16033-16569/1-911	215 223 274	16T 73 143 150 263 309+C 315+C 489 709 750	
YXLPCT505	G4	16020-16569/1-1050	93 114A 223 243 362 519	73 191+A 194 203 204 263 309+C 315+C 489 709 750	+
YXLPCT687	G4	16025-16569/1-909	93 114A 223 243 362 519	73 191+A 194 203 204 263 309+C 315+C 489 709 750	+
YXLPCT702	G4	16021-16569/1-870	93 114A 223 243 362 519	73 191+A 194 203 204 263 309+C 315+C 489 709 750	+
YXLPCT210	J1	16032-16569/1-870	69 126 183C 189 243 294	73 228 263 295 309+C 315+C 324 462 489 523-524d 750	
YXLPCT055	M*	16035-16569/1-911	223 271 319 362 526	73 200 263 309+CC 315+C 483 489 750	+
YXLPCT200	M*	16025-16569/1-870	86 172 223 278 519	73 146 150 195 263 315+C 489 523-524d 750	

YXLPCT292	M*	16013-16569/1-842	223 241C 294 311 519 524	73 146 263 309+C 315+C 489 573+CCC 709 750	+
YXLPCT310	M*	16032-16569/1-870	86 172 223 278 519	73 146 150 195 263 315+C 489 523-524d 750	
YXLPCT411	M*	16020-16569/1-807	86 183 223 278 519	73 146 195 263 315+C 489 523-524d 750	
YXLPCT415	M*	16031-16569/1-806	86 189 193+C 223 362	73 263 309+C 315+C 489 750	
YXLPCT438	M*	16034-16569/1-870	223 311 362 519	73 263 315+C 489 523-524d 750	+
YXLPCT466	M*	16029-16569/1-870	93 124 218 223 295 320 356	73 242-244d 263 315+CC 489 521 709 750	
YXLPCT537	M*	16019-16569/1-898	183C 189 300 304 311 519	73 150 152 189 195 249d 263 315+C 489 523-524d 750	
YXLPCT699	M*	16074-16569/1-905	114 223 362 390 519	73 103 263 315+C 489 750	+
YXLPCT720	M*	16026-16569/1-870	86 192 223 316 362	73 263 315+C 489 750	
YXLPCT751	M*	16043-16569/1-870	124 223 239 263 264+C 325 362 381 519	73 315+C 489 709 750	
YXLPCT798	M*	16036-16569/1-935	86 172 223 278 519	73 146 150 195 263 315+C 489 523-524d 750	
YXLPCT836	M*	16015-16569/1-806	223 303 311 319 362	73 263 309+C 315+C 489 523-524d 750	
YXLPCT299	M10	16022-16569/1-870	223 260 292 311 362	73 146 150 215 263 309+C 315+C 489 524+AC 573+C 750	
YXLPCT654	M10	16033-16569/1-848	129 223 311	73 263 315+C 489 573+CCC 709 750	
YXLPCT244	M10a1	16033-16569/1-819	93 129 193 223 311 357 497	73 146 263 309+C 315+C 489 523-524d 573+CCCCC 709 750	
YXLPCT427	M11	16039-16569/1-911	223	73 146 154 200 215 263 309+C 315+C 318 326 489 750	
YXLPCT126	M11a1	16011-16569/1-806	173 213 223	73 146 198 200 263 309+C 315+C 318 326 489 750	
YXLPCT208	M11a1	16031-16569/1-799	173 223	73 146 200 263 309+C 315+C 318 326 489 750	
YXLPCT309	M11a1	16035-16569/1-870	173 223	73 146 198 200 215 263 309+C 315+C 318 326 489 750	
YXLPCT279	M11a'b	16015-16569/1-902	75 172 173 223	73 200 215 263 315+C 318 326 489 750	
YXLPCT091	M12	16016-16569/1-870	148 172 189 223 234 290 463 519	73 125 127 128 146 195 263 315+C 489 750	
YXLPCT232	M12	16022-16569/1-816	148 172 189 223 234 290 519	73 127 128 146 195 263 315+C 459+C 489 540+C 750	
YXLPCT646	M12	16049-16569/1-870	148 172 189 223 234 290 311 519	73 125 127 128 146 195 263 315+C 489 750	
YXLPCT650	M12	16016-16569/1-754	148 172 189 223 234 290 519	73 127 128 146 195 263 315+C 489 750	
YXLPCT679	M12	16024-16569/1-870	148 172 189 223 234 290 519	73 125 127 128 146 195 263 315+C 489 750	
YXLPCT726	M12	16036-16569/1-870	172 183C 189 223 234 278 290 311 519	73 125 127 128 263 309+CC 315+C 489 750	
YXLPCT135	M13a	16014-16569/1-870	145 148 188 189 192 223 381	73 152 263 315+C 489 750	
YXLPCT823	M13a	16012-16569/1-870	145 148 188 189 223 381	73 152 263 315+C 489 750	
YXLPCT108	M20	16017-16569/1-870	86 129 209 223 272 519	73 152 225 227 249d 263 315+C 316 489 523-524d 750	
YXLPCT161	M20	16013-16569/1-873	129 209 223 272 465 519	73 152 189 207 225 249d 263 315+C 316 489 523-524d 750	
YXLPCT336	M20	16050-16569/1-798	129 209 223 272 519	73 152 225 249d 263 315+C 316 489 523-524d 573+C 750	
YXLPCT346	M20	16050-16569/1-928	86 129 209 223 272 519	73 152 195 225 227 249d 263 315+C 316 489 523-524d 750	
YXLPCT780	M20	16027-16569/1-870	86 129 209 223 272 519	73 152 225 227 249d 263 315+C 489 523-524d 750	
YXLPCT187	M25	16066-16569/1-870	188 189 192 223 304 519	73 263 309+C 315+C 489 750	
YXLPCT375	M25	16057-16569/1-759	188 189 192 223 239 304 519	73 263 309+C 315+C 489 523-524d 750	
YXLPCT598	M25	16038-16569/1-870	188 189 192 223 304 519	73 263 309+CC 315+C 489 750	

YXLPCT620	M25	16014-16569/1-870	188 189 192 223 304 519	73 263 309+C 315+C 489 750	
YXLPCT770	M25	16021-16569/1-898	188 189 192 223 519	73 207 263 291+A 309+C 315+C 489 750	
YXLPCT559	M33b	16078-16569/1-804	223 324 362 519	73 204 263 309+C 315+C 489 676 750	+
YXLPCT697	M33b	16025-16569/1-870	223 324 362 519	73 263 315+C 489 676 750	
YXLPCT180	M33c	16038-16569/1-870	111 189 223 235 311 362 519	73 131 146 263 309+C 315+C 489 750	+
YXLPCT147	M61	16032-16569/1-756	223 270 362 381 519	3 73 152 263 309+C 315+C 489 750	
YXLPCT730	M61	16045-16569/1-870	223 270 319 362 381 519	3 73 152 199 263 309+C 315+C 489 750	+
YXLPCT016	M71	16021-16569/1-870	223 269 271 311	73 150 263 309+C 315+C 489 750	
YXLPCT211	M71	16035-16569/1-842	223 239A 269 271 311	73 150 151 263 309+C 315+C 489 750	
YXLPCT250	M71	16095-16569/1-870	223 269 271 311	73 150 151 263 309+C 315+C 489 750	
YXLPCT504	M71	16025-16569/1-1042	223 269 271 311	73 150 151 263 309+CC 315+C 489 750	
YXLPCT548	M71	16080-16569/1-970	223 269 271	73 150 151 263 309+C 315+C 489 750	
YXLPCT614	M71	16021-16569/1-785	223 269 271 311	73 150 151 263 309+CC 315+C 489 750	
YXLPCT689	M71	16039-16569/1-755	129 140 223 271 295 304	73 143 146 263 315+C 489 750	
YXLPCT703	M71	16041-16569/1-870	223 259 271	73 151 263 282 309+C 315+C 489 750	
YXLPCT765	M71	16018-16569/1-954	223 269 271 311	73 150 151 263 309+CC 315+C 489 750	
YXLPCT015	M74a	16018-16569/1-779	93 223 311 362 381	63 64 66 73 215 263 315+C 489 523-524d 750	
YXLPCT043	M74a	16026-16569/1-904	93 223 311 362 381	63 64 66 73 215 263 315+C 489 523-524d 750	
YXLPCT328	M74a	16034-16569/1-870	93 223 311 362 381	63 64 66 73 215 263 315+C 489 523-524d 750	
YXLPCT370	M74a	16029-16569/1-870	93 223 311 362 381	63 64 66 73 215 263 309+C 315+C 489 750	
YXLPCT441	M74a	16037-16569/1-824	93 223 311 362 381	63 64 66 73 215 263 315+C 489 523-524d 750	
YXLPCT188	M75	16050-16569/1-908	68 126 182C 183C 189 223 325 519	73 146 150 152 195 263 309 310 489 524+AC 750	
YXLPCT011	M7b	16020-16569/1-870	129 192 223 297	73 150 182 199 263 309+C 315+C 459d 489 750	
YXLPCT056	M7b	16049-16569/1-910	129 189 223 297	73 150 199 204 263 309+C 315+C 456 489 750	
YXLPCT074	M7b	16020-16569/1-904	223 297	73 150 199 204 263 309+C 315+C 489 750	
YXLPCT086	M7b	16034-16569/1-910	176 223 292A 297	66 73 150 199 263 309+C 315+C 489 750	
YXLPCT195	M7b	16050-16569/1-886	221 223 297	73 150 199 204 263 315+C 489 750	
YXLPCT214	M7b	16062-16569/1-908	129 189 192+T 223 297	73 150 199 263 315+C 489 750	
YXLPCT326	M7b	16017-16569/1-870	129 192 223 297	73 150 199 263 309+CC 315+C 489 538 750	
YXLPCT373	M7b	16047-16569/1-815	179 223 297	73 150 199 263 309+C 315+C 489 750	
YXLPCT394	M7b	16024-16569/1-783	176 223 297	66 73 150 199 263 309+C 315+C 489 750	
YXLPCT471	M7b	16017-16569/1-870	129 183C 189 223 297	73 150 199 204 263 309+CC 315+C 456 489 750	
YXLPCT485	M7b	16043-16569/1-1002	129 148 223 297	73 150 159 199 263 309+C 315+C 489 750	
YXLPCT716	M7b	16016-16569/1-899	129 189 223 297	73 150 199 204 263 309+C 315+C 456 489 750	
YXLPCT761	M7b	16014-16569/1-954	129 189 223 248 297	73 150 189 195 199 204 207 263 309+CC 315+C 489 750	
YXLPCT791	M7b	16015-16569/1-971	129 189 223 248 297 519	73 150 195 199 204 207 263 309+CC 315+C 489 750	

YXLPCT024	M7b1	16031-16569/1-870	129 192 223 297	73 150 199 263 315+C 489 750
YXLPCT064	M7b1	16038-16569/1-893	129 189 192 207R 223 297	73 150 199 204 207 263 315+C 489 750
YXLPCT172	M7b1	16061-16569/1-908	129 192 223 297	73 150 199 258Y 263 309+CC 315+C 489 750
YXLPCT225	M7b1	16105-16569/1-897	129 192 223 297	73 125G 150 199 263 309+C 315+C 379C 489 750
YXLPCT330	M7b1	16019-16569/1-842	129 192 223 297 422	73 150 182 199 263 315+C 459d 489 750
YXLPCT340	M7b1	16067-16569/1-767	129 192 223 297	73 150 182 199 263 309+C 315+C 459d 489 750
YXLPCT401	M7b1	16041-16569/1-897	129 192 223 256 297 309	73 150 194 199 263 315+C 489 709 750
YXLPCT482	M7b1	16036-16569/1-958	129 192 223 297	73 150 199 263 291+A 309+C 315+C 489 750
YXLPCT501	M7b1	16024-16569/1-954	129 189 192 223 297	73 150 199 204 207 263 315+C 489 750
YXLPCT517	M7b1	16015-16569/1-909	129 192 223 297	73 150 199 263 315+C 489 750
YXLPCT525	M7b1	16054-16569/1-945	129 192 223 297	73 150 199 263 309+C 315+C 489 750
YXLPCT544	M7b1	16049-16569/1-773	129 192 223 293 297	73 150 199 204 263 309+C 315+C 489 710 750
YXLPCT599	M7b1	16017-16569/1-907	129 192 223 297	73 150 182 199 263 315+C 459d 489 750
YXLPCT674	M7b1	16022-16569/1-907	129 192 223 297	73 150 199 263 309+C 315+C 489 750
YXLPCT676	M7b1	16019-16569/1-903	129 192 223 297	64 73 150 199 207 263 309+C 315+C 489 750
YXLPCT692	M7b1	16073-16569/1-913	129 189 192 223 297 519	73 150 199 263 309+C 315+C 489 593 750
YXLPCT731	M7b1	16016-16569/1-905	129 192 223 297	73 150 182 199 263 315+C 459d 489 523-524d 750
YXLPCT748	M7b1	16047-16569/1-870	129 192 223 297 362 400	73 150 199 217 263 315+C 489 750
YXLPCT752	M7b1	16018-16569/1-870	129 192 223 297 362 400	73 150 263 309+C 315+C 489 750
YXLPCT815	M7b1	16026-16569/1-959	129 192 223 297 362 400	73 150 199 217 263 315+C 489 750
YXLPCT843	M7b1	16041-16569/1-971	111 129 189 192 223 297	73 150 199 204 207 263 315+C 489 750
YXLPCT408	M7b1'2	16054-16569/1-840	129 223 297	73 150 159 199 263 309+C 315+C 489 750
YXLPCT434	M7b1'2	16060-16569/1-857	129 183C 189 223 297	73 150 199 204 263 309+CC 315+C 456 489 750
YXLPCT553	M7b1'2	16042-16569/1-964	129 223 297 527	73 150 199 263 309+C 315+C 489 750
YXLPCT755	M7b1'2	16013-16569/1-952	129 183C 189 223 297	73 150 199 204 263 309+CC 315+C 456 489 750
YXLPCT789	M7c	16017-16569/1-868	93 362 519	73 146A 199 263 315+C 489 523-524d 709 750
YXLPCT839	M7c	16041-16569/1-1002	223 294 295 519	73 146 159 263 309+C 315+C 489 523-524d 750
YXLPCT059	M7c1a	16035-16569/1-943	223 295 319 519	73 146 199 309+C 315+C 489 513 523-524d 750
YXLPCT461	M7c3	16055-16569/1-870	86 173 223 295 362 519	73 146 199 263 315+C 489 523-524d 750
YXLPCT603	M7c3	16046-16569/1-833	519	73 146A 199 204 263 309+C 315+C 489 523-524d 750
YXLPCT638	M7c3	16032-16569/1-913	181 519	73 146A 199 263 309+C 315+C 489 523-524d 750
YXLPCT642	M7c3	16016-16569/1-906	519	73 146A 199 263 315+C 489 523-524d 750
YXLPCT710	M7c3	16038-16569/1-903	86 172 187 223 295 519	73 146 199 263 315+C 489 523-524d 750
YXLPCT349	M8a	16032-16569/1-784	189 265C 298 319	73 263 309+CC 315+C 489 750
YXLPCT616	M8a	16032-16569/1-806	184 223 298 319	73 200 263 309+C 315+C 489 750
YXLPCT635	M8a	16014-16569/1-806	184 223 298 319	73 263 309+CC 315+C 489 750

YXLPCT640	M8a	16033-16569/1-870	184 223 298 319	73 263 309+CC 315+C 489 750	
YXLPCT644	M8a	16033-16569/1-870	184 223 298 319 519	73 152 263 309+C 315+C 489 523-524d 750	
YXLPCT781	M8a	16049-16569/1-870	184 189 223 298 319 470 471 473 476T	73 263 309+C 315+C 489 750	
YXLPCT046	M8a2	16058-16569/1-869	184 223 298 319	73 263 309+CC 315+C 489 750	
YXLPCT052	M8a2	16017-16569/1-898	134 184 223 298 319	73 263 315+c 489 595 750	
YXLPCT230	M8a2	16018-16569/1-870	184 223 293 298 319	73 152 263 315+C 489 750	
YXLPCT236	M8a2	16052-16569/1-945	184 223 298 319	73 152 263 315+C 489 750	
YXLPCT285	M8a2	16022-16569/1-870	184 223 298 319	73 200 263 309+C 315+C 489 750	
YXLPCT304	M8a2	16017-16569/1-870	184 223 298 319	73 152 263 315+C 489 750	
YXLPCT374	M8a2	16038-16569/1-870	184 189 223 298 319	73 263 309+C 315+C 489 750	
YXLPCT561	M8a2	16066-16569/1-831	184 223 298 319	73 152 263 315+C 489 750	
YXLPCT651	M8a2	16022-16569/1-901	184 189 223 298 319 470 471 473	73 146 263 309+C 315+C 489 750	
YXLPCT833	M8a2	16017-16569/1-870	184 189 223 298 319 470 471 473 476T	73 263 309+CC 315+C 489 750	
YXLPCT847	M8a2a	16071-16569/1-899	184 189 223 298 311 319 390 468 470 471 473	73 263 309+CC 315+C 489 750	
YXLPCT564	M9a	16033-16569/1-959	113C 184 223 234 271 362	73 153 249 263 315+C 489 750	+
YXLPCT209	M9a1a	16020-16569/1-870	223 234 291 316 362 566	73 153 263 309+C 315+C 489 750	
YXLPCT219	M9a1a	16051-16569/1-900	223 234 316 362	73 153 263 315+C 489 750	
YXLPCT222	M9a1a	16028-16569/1-779	223 234 316 362	73 153 263 315+C 489 750	
YXLPCT243	M9a1a	16027-16569/1-844	145 223 234 316	73 153 263 309+C 315+C 489 523-524d 750	
YXLPCT448	M9a1a	16038-16569/1-870	223 234 316 362	73 153 263 309+C 315+C 489 750	
YXLPCT472	M9a1a	16052-16569/1-870	223 234 291 316 362	73 153 263 309+C 315+C 489 750	
YXLPCT491	M9a1a	16034-16569/1-959	223 234 291 316 362	73 143 152 153 263 309+C 315+C 489 750	
YXLPCT671	M9a1a	16033-16569/1-870	223 234 291 316 362 566	73 153 263 309+CC 315+C 489 750	
YXLPCT779	M9a1a	16032-16569/1-870	223 234 291 316 362	73 153 263 309+C 315+C 489 750	
YXLPCT037	M9a1a1a	16048-16569/1-906	223 234 263 316 362 519	73 263 315+C 489 750	
YXLPCT115	M9a1a1a	16015-16569/1-870	129 234 316 362	73 263 309+C 315+C 489 750	+
YXLPCT416	M9a1a1a	16033-16569/1-894	223 234 316 362	73 146 153R 263 309+C 315+C 489 750	
YXLPCT470	M9a1a1c	16049-16569/1-870	223 234 291 295 316 362	73 153 263 315+C 489 523-524d 750	
YXLPCT281	M9a1a2	16051-16569/1-870	145 223 234 316	73 153 263 309+CC 315+C 489 513 750	
YXLPCT423	M9a1a2	16032-16569/1-870	145 223 234 316	73 153 263 309+C 315+C 489 513 750	
YXLPCT450	M9a1a2	16031-16569/1-795	145 223 234 316	73 153 263 309+C 315+C 489 513 750	
YXLPCT140	M9a1b1	16026-16569/1-870	158 223 234 290 362 519	73 150 152 153 263 315+C 489 750	
YXLPCT143	M9a1b1	16016-16569/1-870	158 223 234 362 519	73 150 152 153 263 309+CC 315+C 489 750	
YXLPCT263	M9a1b1	16053-16569/1-870	158 223 234 362 519	73 150 152 153 195 263 315+C 489 750	
YXLPCT350	M9a1b1	16060-16569/1-758	158 223 234 362 519	73 150 152 153 263 315+C 489 750	
YXLPCT634	M9a1b1	16020-16569/1-788	158 223 234 362 519	73 150 152 153 263 315+C 489 709 750	+

YXLPCT800	M9a1b1	16018-16569/1-971	158 223 234 362 519	73 150 152 153 195 263 315+ 489 750
YXLPCT010	M9a4a	16027-16569/1-870	93 223 234 271 362	73 263 309+C 315+C 489 750
YXLPCT738	M9b	16042-16569/1-777	51 209 223 362 519	73 153 199 263 315+C 489 573+CCCCC 709 750
YXLPCT403	N*	16031-16569/1-907	51 86 169 172 189 209 218 223 319 519	73 146 152 195 263 309+C 315+C
YXLPCT810	N*	16020-16569/1-870	172 231 390 519	73 146 263 309+C 315+C 750
YXLPCT742	N10	16031-16569/1-870	69 172 223 278 291A 298 311G 362	73 150 152 199 263 309+C 315+C 709
YXLPCT092	N11	16033-16569/1-801	145 189 223 355 519	73 195 240 263 315+C 523-524d 750 813
YXLPCT109	N11	16020-16569/1-870	145 189 223 311 355 519	73 195 240 263 315+C 523-524d 750 813
YXLPCT218	N11	16051-16569/1-890	145 189 223 355 519	73 195 240 263 315+C 523-524d 750 813
YXLPCT428	N11	16027-16569/1-870	145 189 223 355 519	73 195 240 263 315+C 523-524d 750 813
YXLPCT542	N11	16043-16569/1-870	145 189 223 311 355 519	73 195 240 263 315+C 523-524d 750 813
YXLPCT146	N21	16024-16569/1-870	182 193 223 260 519	73 150 195 214 241+TAA 263 315+C 337d 750
YXLPCT216	N21	16052-16569/1-865	182 193 223 260 519	73 150 195 214 241+TAA 263 315+C 337d 750
YXLPCT296	N21	16032-16569/1-776	182 193 223 260 519	73 150 195 214 263 315+C 337d 750
YXLPCT344	N21	16051-16569/1-833	182 193 223 355 519	73 150 195 263 309+C 315+C 337d 750
YXLPCT443	N21	16043-16569/1-870	182 193 223 260 519	73 150 195 214 263 315+C 337d 750
YXLPCT680	N21	16047-16569/1-865	193 223 519	73 150 195 263 309+C 315+C 337d 523-524d 750
YXLPCT739	N21	16016-16569/1-954	182 193 223 519	73 150 195 263 309+CC 315+C 337d 750
YXLPCT795	N21	16043-16569/1-923	182 193 223 260 519	73 150 195 214 241+TAA 263 315+C 337d 750
YXLPCT812	N21	16024-16569/1-760	182 193 223 260 519	73 150 195 214 231+ATA 263 337d 750
YXLPCT014	N9a	16016-16569/1-870	223 257A 261 519	73 150 263 309+C 315+C 750
YXLPCT019	N9a	16020-16569/1-870	223 257A 261 519	73 150 263 315+C 750
YXLPCT041	N9a	16046-16569/1-905	223 257A 261 519	73 89 93 150 263 309+C 315+C 750
YXLPCT093	N9a	16036-16569/1-884	51 172 223 257A 261	73 150 185 263 309+C 315+C 750
YXLPCT100	N9a	16031-16569/1-786	223 257A 261 311 519	73 150 195 263 309+C 315+C 750
YXLPCT124	N9a	16032-16569/1-773	223 257A 519	73 146 150 263 309+C 315+C 750
YXLPCT207	N9a	16006-16569/1-870	129 162 173Y 223 250 257A 261	73 150 152Y 263 309+C 315+C 523-524d 750
YXLPCT221	N9a	16027-16569/1-870	51 223 257A 261	73 150 185 263 309+C 315+C 750
YXLPCT251	N9a	16054-16569/1-870	172 189 223 247 257A 261 316	73 150 195 204 263 315+C 750
YXLPCT395	N9a	16038-16569/1-862	93 223 257A 261	73 150 263 282 315+C 750
YXLPCT488	N9a	16044-16569/1-971	136 140 223 257A 261 311	73 150 263 309+CC 315+C 750
YXLPCT503	N9a	16021-16569/1-1017	223 257A 261 311 390	73 150 263 309+CC 315+C 523-524d 750
YXLPCT597	N9a	16048-16569/1-870	172 189 223 257A 261	73 150 263 310 750
YXLPCT073	N9a1	16039-16569/1-910	111 129 189 223 257A 261	73 150 263 315+C 750
YXLPCT282	N9a1	16083-16569/1-870	111 129 223 257A 261	73 150 263 309+CC 315+C 750
YXLPCT303	N9a1	16038-16569/1-893	111 129 223 257A 259 261	73 150 263 309+C 315+C 750

YXLPCT379	N9a1	16052-16569/1-831	111 129 223 257A 261	73 150 263 309+C 315+C 750
YXLPCT405	N9a1	16023-16569/1-870	51 111 129 223 257A 261	73 150 263 309+C 315+C 750
YXLPCT489	N9a1	16019-16569/1-760	111 129 223 257A 261	73 150 263 309+CC 315+C 750
YXLPCT575	N9a1	16044-16569/1-790	111 129 189 223 257A 261	73 150 263 315+C 750
YXLPCT589	N9a1	16050-16569/1-870	111 129 223 257A 261 265T	73 150 263 309+C 315+C 750
YXLPCT653	N9a1	16037-16569/1-870	111 129 223 257A 261 265T	73 150 200 263 309+CC 315+C 750
YXLPCT576	N9a4	16014-16569/1-806	145 172 223 245 257A 261	73 150 263 268 315+C 522-525+ACAC 750
YXLPCT006	R11	16028-16569/1-870	183C 189 304 311 365 519	73 185 189 195 263 309+CC 315+C 709 750
YXLPCT615	R11	16042-16569/1-870	183C 189 311 519	69 73 185 189 263 309+C 315+C 709 750
YXLPCT797	R11	16043-16569/1-860	129 182C 183C 189 311 519	73 131 185 189 263 309+CC 315+C 523-524d 709 750
YXLPCT291	R22	16035-16569/1-870	169 249 265C 288 291 304 519	73 152 199 263 315+C 329 750
YXLPCT436	R9	16018-16569/1-787	311	73 235 249d 263 309+C 315+C 750
YXLPCT021	R9b	16021-16569/1-870	189 192 304 309 390 519	73 152 263 309+C 315+C 523-524d 750
YXLPCT141	R9b	16043-16569/1-870	91 124 148 304 309 390 519	73 235 263 309+C 315+C 524+AC 750
YXLPCT153	R9b	16034-16569/1-870	209 278 304 309 390	73 263 309+C 315+C 523-524d 750
YXLPCT190	R9b	16027-16569/1-870	122 153 209 295 304 309 390 519	73 146 263 309+CC 315+C 523-524d 750
YXLPCT224	R9b	16054-16569/1-870	209 278 304 309 390	73 263 309+C 315+C 523-524d 750
YXLPCT371	R9b	16058-16569/1-884	189 304 309 390 519	73 152 263 309+CC 315+C 523-524d 750
YXLPCT381	R9b	16072-16569/1-752	189 192 304 309 390 519	73 152 263 309+C 315+C 523-524d 750
YXLPCT481	R9b	16040-16569/1-863	92 192 304 309 390 519	73 183 263 315+C 523-524d 537 573+CCC 750
YXLPCT563	R9b	16035-16569/1-831	259 288 304 309 390 519	73 143 183 263 315+C 523-524d 567+3C 750
YXLPCT592	R9b	16054-16569/1-870	124 148 304 309 390 519	73 263 309+CC 315+C 750
YXLPCT605	R9b	16032-16569/1-806	192 304 309 390 519	73 152 263 309+C 315+C 523-524d 750
YXLPCT633	R9b	16042-16569/1-869	209 278 304 309 390	73 263 309+C 315+C 523-524d 750
YXLPCT128	R9b1a1	16022-16569/1-805	192 259 288 304 309 390 519	73 143 183 263 315+C 523-524d 573+CCCCC 750
YXLPCT462	R9b1a1	16033-16569/1-785	192 259 288 304 309 390 519	73 143 183 263 315+C 523-524d 573+CCCCC 750
YXLPCT267	R9c	16062-16569/1-870	157 304 324	73 263 309+C 315+C 479 750
YXLPCT286	R9c	16013-16569/1-870	157 304 324	73 263 309+C 315+C 479 750
YXLPCT295	R9c	16031-16569/1-870	157 158 304	73 151 199 263 309+C 315+C 479 750
YXLPCT636	Y1b	16027-16569/1-806	126 231 266 519	73 146 207 263 315+C 750
YXLPCT655	Y1b	16031-16569/1-904	126 231 266 319 399 519	73 146 263 309+CC 315+C 709 750
YXLPCT118	Y2	16023-16569/1-870	126 231 311	73 263 309+C 315+C 482 750
YXLPCT005	Z	16032-16569/1-901	185 223 224 234A 260 298 302	73 152 249d 263 309+C 315+C 489 750
YXLPCT032	Z	16046-16569/1-870	185 260 298	73 152 249d 263 309+C 315+C 489 513 750
YXLPCT049	Z	16027-16569/1-911	185 223 260 298	73 210 249d 263 315+CC 489 750
YXLPCT058	Z	16027-16569/1-904	185 223 260 298	73 152 249d 263 309+C 315+C 489 513 750

YXLPCT069	Z	16032-16569/1-971	124 223 260 298 519	73 152 207 249d 263 309+C 315+C 489 750
YXLPCT077	Z	16038-16569/1-831	185 223 260 261 298 302 360	73 151 152 249d 263 309+C 315+C 489 750
YXLPCT090	Z	16061-16569/1-870	185 223 260 298	73 152 249d 263 309+C 315+C 489 513 750 789
YXLPCT119	Z	16020-16569/1-887	185 223 260 298	73 152 249d 263 309+C 315+C 489 513 750
YXLPCT181	Z	16031-16569/1-870	185 223 260 298	73 151 152 249d 263 315+C 489 750
YXLPCT249	Z	16025-16569/1-870	185 223 260 298	73 151 152 249d 263 309+C 315+C 489 750
YXLPCT319	Z	16040-16569/1-870	223 260 298	73 152 214 245 249d 263 315+C 489 709 750
YXLPCT331	Z	16021-16569/1-870	185 223 260 291 298	73 151 152 249d 263 309+C 315+C 489 750
YXLPCT345	Z	16017-16569/1-870	126Y 185 260 298 519	73 249d 263 315+C 489 523-524d 750
YXLPCT452	Z	16017-16569/1-870	185 223 260 298 302	73 151 152 249d 263 309+C 315+C 489 750
YXLPCT463	Z	16071-16569/1-870	185 223 260 294 298	73 152 249d 263 315+C 489 523-524d 750
YXLPCT473	Z	16041-16569/1-870	185 223 255 260 265C 298 302 399	73 151 152 249d 263 309+C 315+C 489 750
YXLPCT601	Z	16061-16569/1-870	185 223 260 298 519	73 151 152 249d 263 315+C 489 523-524d 750
YXLPCT606	Z	16017-16569/1-870	185 223 260 298	73 152 249d 263 315+C 489 513 750
YXLPCT608	Z	16046-16569/1-836	136 170 185 223 260 298	73 152 195 249d 263 315+C 489 750
YXLPCT627	Z	16023-16569/1-898	185 223 260 298	73 151 152 249d 263 309+C 3015+C 489 750
YXLPCT709	Z	16077-16569/1-834	185 223 260 274 298	73 152 207 249d 263 309+CC 315+C 489 709 750
YXLPCT743	Z	16014-16569/1-910	185 223 260 291 298	73 151 152 249d 263 309+C 315+C 489 750
YXLPCT785	Z	16034-16569/1-882	185 223 260 298 302	73 151 152 249d 263 309+C 315+C 489 750
YXLPCT821	Z	16032-16569/1-870	93 185 223 260 294 298	73 146 152 195 249d 263 309+C 315+C 489 709 750

Note – Sequence variation was scored relative to the revised Cambridge reference sequence (rCRS) [1]. Suffixes A, G, C and T indicate transversions. "R", "Y", "M" indicate heteroplasmy for A and G, C and T, A and C, respectively. "d" and "+" indicate deletions and insertions, respectively. Indels (insertion and deletion) are recorded at the last possible site. "+" and "-" denote the absence and presence of the restriction site, respectively. The sequences reported in this study have been deposited in GenBank under accession numbers JQ036355-JQ037738.

Supplementary Reference

1. Andrews RM, Kubacka I, Chinnery PF, Lightowlers RN, Turnbull DM, Howell N (1999) Reanalysis and revision of the Cambridge reference sequence for human mitochondrial DNA. *Nat Genet* 23:147

Table S2. mtDNA copy number in leprosy patients (n=296) and controls (n=231) with different haplogroup status

Haplogroup*	Leprosy patients		Controls		P-value [#]
	No.	Mean \pm SD	No.	Mean \pm SD	
C	11	56.14 \pm 35.45	11	51.72 \pm 12.32	0.700
Z	9	64.61 \pm 49.30	8	57.09 \pm 11.60	0.668
M7b	8	72.18 \pm 40.66	12	56.86 \pm 19.45	0.271
M9a	7	50.25 \pm 21.26	5	47.63 \pm 16.95	0.824
D4	29	75.41 \pm 49.58	30	59.44 \pm 22.59	0.115
D5	10	48.34 \pm 14.83	10	55.60 \pm 12.98	0.259
G	20	58.02 \pm 30.05	16	54.99 \pm 24.96	0.734
A	25	56.08 \pm 28.73	20	65.96 \pm 18.16	0.188
N9a	9	70.60 \pm 52.77	10	66.98 \pm 20.06	0.841
B4	48	70.09 \pm 34.27	26	69.51 \pm 17.13	0.936
B5	18	57.78 \pm 28.74	8	58.96 \pm 15.77	0.915
F	58	72.71 \pm 43.57	40	61.00 \pm 18.04	0.071
P-value [‡]		0.379		0.132	

* Haplogroups occurred in less than four individuals were excluded.

[#] P-value was calculated by student's unpaired *t* test (two tailed).

[‡] P-value of one-way analysis of variance (ANOVA) for the difference of mtDNA copy number among different haplogroups.