

The frequency of each *HLA-B* promoter and *HLA-B* coding haplotype that was observed in worldwide samples.

- For promoter sequences, please refer to the HLA-B promoter alignment.
- HLA-B alleles are provided as 4-field alleles. Grouped alleles differ in positions that we did not explore. Alleles indicated as undefined might represent new HLA-B 4-field alleles, because their sequences are different from any described allele. In those cases, we indicate the closest HLA-B allele followed by the number of mismatches.

Promoter	HLA-B 4-field alleles	Frequency (N = 5,347)
P01_01	B*35:01:01:05,B*35:01:01:06,B*35:01:01:16,B*35:01:01:19	0.03984
P01_01	B*53:01:01:01	0.03058
P01_01	B*58:01:01:01,B*58:01:01:03	0.02936
P01_01	B*35:03:01:01	0.01047
P01_01	B*35:02:01:02	0.00888
P01_01	B*35:03:01:03	0.00692
P01_01	B*58:02:01:01	0.00645
P01_01	B*35:08:01:01	0.00449
P01_01	B*35:01:01:18	0.00206
P01_01	undefined[B*35:01:01:07(1)]	0.00112
P01_01	undefined[B*35:01:01:07(1)]	0.00103
P01_01	undefined[B*53:01:01:01(1)]	0.00065
P01_01	undefined[B*35:01:01:07(1)]	0.00056
P01_01	undefined[B*53:01:01:01(1)]	0.00056
P01_01	undefined[B*58:01:01:01(1)]	0.00047
P01_01	B*35:03:01:08	0.00047
P01_01	undefined[B*53:01:01:02(1)]	0.00047
P01_01	undefined[B*35:03:01:02(1)]	0.00047
P01_01	undefined[B*58:01:01:01(1)]	0.00037
P01_01	undefined[B*53:01:01:01(1)]	0.00037
P01_01	undefined[B*35:08:01:04(1)]	0.00037
P01_01	B*35:05:01:01	0.00037
P01_01	undefined[B*35:02:01:03(1)]	0.00037
P01_01	undefined[B*53:01:01:02(1)]	0.00037
P01_01	undefined[B*35:03:01:02(1)]	0.00028
P01_01	undefined[B*35:08:01:04(1)]	0.00028
P01_01	undefined[B*35:03:01:02(1)]	0.00028
P01_01	undefined[B*58:01:01:06(1)]	0.00028
P01_01	undefined[B*35:02:01:03(1)]	0.00028
P01_01	undefined[B*35:01:01:07(1)]	0.00028
P01_01	undefined[B*35:03:01:02(1)]	0.00028
P01_01	B*35:01:01:61	0.00028
P01_01	undefined[B*58:01:01:06(1)]	0.00019
P01_01	B*35:01:01:53	0.00019
P01_01	B*35:41	0.00019
P01_01	undefined[B*35:01:01:07(1)]	0.00019
P01_01	undefined[B*35:03:01:02(1)]	0.00019
P01_01	undefined[B*58:01:01:01(1)]	0.00019
P01_01	undefined[B*35:01:01:07(1)]	0.00019
P01_01	undefined[B*35:01:01:07(1)]	0.00019
P01_01	undefined[B*35:01:01:07(1)]	0.00019
P01_01	undefined[B*35:01:01:07(1)]	0.00019
P01_01	undefined[B*35:01:01:07(1)]	0.00019
P01_01	undefined[B*53:01:01:02(1)]	0.00019
P01_01	undefined[B*35:03:01:02(1)]	0.00009
P01_01	undefined[B*35:01:01:07(1)]	0.00009
P01_01	undefined[B*35:02:01:03(1)]	0.00009
P01_01	undefined[B*53:01:01:02(1)]	0.00009
P01_01	undefined[B*53:01:01:01(1)]	0.00009
P01_01	B*35:08:01:05	0.00009
P01_01	undefined[B*35:03:01:01(1)]	0.00009
P01_01	undefined[B*35:03:01:02(1)]	0.00009
P01_01	undefined[B*35:03:01:02(1)]	0.00009
P01_01	undefined[B*53:01:01:01(1)]	0.00009
P01_01	undefined[B*35:151:02(1)]	0.00009
P01_01	undefined[B*58:01:01:01(1)]	0.00009
P01_01	undefined[B*53:01:01:02(1)]	0.00009
P01_01	undefined[B*35:01:01:07(1)]	0.00009
P01_01	undefined[B*58:01:01:06(1)]	0.00009
P01_01	undefined[B*53:01:01:01(1)]	0.00009
P01_01	undefined[B*58:02:01:02(1)]	0.00009

P01_01	undefined[B*53:01:01:02(1)]	0.00009
P01_01	undefined[B*53:01:01:02(1)]	0.00009
P01_01	undefined[B*53:01:01:01(1)]	0.00009
P01_01	undefined[B*58:01:01:01(1)]	0.00009
P01_01	undefined[B*58:01:01:06(1)]	0.00009
P01_01	undefined[B*35:01:01:07(1)]	0.00009
P01_01	undefined[B*35:03:01:02(1)]	0.00009
P01_01	undefined[B*53:01:01:02(1)]	0.00009
P01_01	undefined[B*58:01:01:06(1)]	0.00009
P01_01	undefined[B*07:02:01:02(100)]	0.00009
P01_01	undefined[B*53:01:01:02(1)]	0.00009
P01_01	undefined[B*35:01:01:07(1)]	0.00009
P01_01	undefined[B*35:01:01:07(1)]	0.00009
P01_01	undefined[B*53:01:01:02(1)]	0.00009
P01_01	undefined[B*07:114(100)]	0.00009
P01_01	undefined[B*07:02:01:72(100)]	0.00009
P01_01	undefined[B*35:01:01:05(1)]	0.00009
P01_01	undefined[B*35:01:01:07(1)]	0.00009
P01_01	undefined[B*51:04:01(10)]	0.00009
P01_01	undefined[B*35:01:01:05(1)]	0.00009
P01_01	undefined[B*35:03:01:02(1)]	0.00009
P01_01	undefined[B*35:05:01:04(10)]	0.00009
P01_01	undefined[B*35:03:01:02(1)]	0.00009
P01_01	undefined[B*35:08:01:04(1)]	0.00009
P01_01	B*35:03:01:14	0.00009
P01_01	undefined[B*35:01:01:07(1)]	0.00009
P01_01	undefined[B*35:02:01:02(1)]	0.00009
P01_01	undefined[B*35:01:01:05(1)]	0.00009
P01_01	undefined[B*35:08:01:04(1)]	0.00009
P01_01	undefined[B*53:01:01:02(1)]	0.00009
P01_01	undefined[B*35:01:01:03(1)]	0.00009
P01_01	undefined[B*58:02:01:02(1)]	0.00009
P01_01	undefined[B*35:01:01:07(1)]	0.00009
P01_01	undefined[B*35:01:01:07(1)]	0.00009
P01_01	undefined[B*35:05:01:04(10)]	0.00009
P01_01	undefined[B*53:01:01:01(1)]	0.00009
P01_01	undefined[B*35:01:01:07(1)]	0.00009
P01_01	B*58:01:35	0.00009
P01_01	undefined[B*58:01:01:06(1)]	0.00009
P01_01	undefined[B*53:01:01:02(1)]	0.00009
P01_01	undefined[B*35:01:01:07(1)]	0.00009
P01_01	undefined[B*53:01:01:02(1)]	0.00009
P01_01	undefined[B*58:01:01:01(1)]	0.00009
P01_01	undefined[B*53:01:01:02(1)]	0.00009
P01_01	undefined[B*35:02:01:03(10)]	0.00009
P01_01	undefined[B*58:02:01:02(1)]	0.00009
P01_01	undefined[B*53:01:01:02(1)]	0.00009
P01_01	undefined[B*07:129(100)]	0.00009
P01_01	undefined[B*53:01:01:02(1)]	0.00009
P01_01	undefined[B*35:01:01:03(1)]	0.00009
P01_01	undefined[B*58:02:01:02(1)]	0.00009
P01_01	undefined[B*07:114(100)]	0.00009
P01_01	undefined[B*35:08:01:01(1)]	0.00009
P01_01	undefined[B*35:01:01:07(1)]	0.00009
P01_01	undefined[B*35:03:01:01(10)]	0.00009
P01_01	undefined[B*35:02:01:03(1)]	0.00009
P01_01	undefined[B*07:304(100)]	0.00009
P01_01	undefined[B*35:05:01:04(1)]	0.00009
P01_01	undefined[B*35:01:01:07(1)]	0.00009
P01_02	B*51:01:01:01,B*51:01:01:04,B*51:01:01:05,B*51:01:01:06,B*51:01:01:09,B*51:01:01:10,B*51:01:01:11,B*51:01:01:13,B*51:01:01:34,B*51:01:01:84	0.04507
P01_02	B*52:01:01:02	0.01468
P01_02	B*52:01:01:01	0.00655
P01_02	B*52:01:02:01,B*52:01:02:02,B*52:01:02:03	0.00617
P01_02	B*78:01:01:02	0.00262
P01_02	B*51:01:01:03,B*51:01:01:12	0.00234
P01_02	B*51:06:01:01	0.00206
P01_02	undefined[B*51:01:01:01(1)]	0.00159
P01_02	B*51:02:01:01,B*51:02:01:02	0.00140
P01_02	B*51:01:01:07,B*51:01:01:08,B*51:01:01:33	0.00131
P01_02	B*51:08:01:01	0.00065
P01_02	undefined[B*51:01:01:02(1)]	0.00056
P01_02	B*51:193:01	0.00047
P01_02	undefined[B*51:01:01:02(1)]	0.00037
P01_02	B*51:07:01	0.00037

P01_02	undefined[B*51:01:01:01(1)]	0.00037
P01_02	undefined[B*51:01:01:02(1)]	0.00037
P01_02	undefined[B*52:01:01:05(1)]	0.00028
P01_02	undefined[B*52:01:01:02(1)]	0.00028
P01_02	undefined[B*52:01:02:01(1)]	0.00028
P01_02	undefined[B*51:01:01:02(1)]	0.00028
P01_02	undefined[B*51:01:01:02(1)]	0.00019
P01_02	undefined[B*51:01:01:02(1)]	0.00019
P01_02	undefined[B*52:01:02:01(1)]	0.00019
P01_02	B*51:01:01:26	0.00019
P01_02	B*51:01:01:46	0.00019
P01_02	undefined[B*78:01:01:03(1)]	0.00019
P01_02	undefined[B*78:01:01:02(1)]	0.00019
P01_02	B*51:01:05	0.00019
P01_02	undefined[B*51:01:01:02(1)]	0.00019
P01_02	undefined[B*52:01:01:05(1)]	0.00009
P01_02	undefined[B*52:01:01:05(1)]	0.00009
P01_02	B*51:01:01:93	0.00009
P01_02	undefined[B*51:238(1)]	0.00009
P01_02	undefined[B*52:01:01:05(1)]	0.00009
P01_02	B*51:01:07	0.00009
P01_02	B*51:04:01	0.00009
P01_02	undefined[B*78:02:01(1)]	0.00009
P01_02	undefined[B*52:01:01:05(1)]	0.00009
P01_02	undefined[B*51:01:01:02(1)]	0.00009
P01_02	undefined[B*51:01:01:02(1)]	0.00009
P01_02	undefined[B*51:06:01:02(1)]	0.00009
P01_02	undefined[B*52:01:01:01(1)]	0.00009
P01_02	undefined[B*51:01:01:02(1)]	0.00009
P01_02	undefined[B*51:08:01:02(1)]	0.00009
P01_02	undefined[B*51:259(1)]	0.00009
P01_02	undefined[B*51:01:01:02(1)]	0.00009
P01_02	B*51:19	0.00009
P01_02	undefined[B*07:50(100)]	0.00009
P01_02	undefined[B*52:01:01:02(1)]	0.00009
P01_02	undefined[B*52:01:01:05(1)]	0.00009
P01_02	undefined[B*51:01:01:02(1)]	0.00009
P01_02	undefined[B*52:01:02:04(1)]	0.00009
P01_02	undefined[B*51:01:01:02(1)]	0.00009
P01_02	undefined[B*51:06:01:03(1)]	0.00009
P01_02	undefined[B*51:01:01:02(1)]	0.00009
P01_02	undefined[B*51:01:01:02(1)]	0.00009
P01_02	undefined[B*52:01:01:05(1)]	0.00009
P01_02	undefined[B*52:01:01:01(1)]	0.00009
P01_02	undefined[B*51:01:01:01(1)]	0.00009
P01_02	undefined[B*52:01:01:05(1)]	0.00009
P01_02	undefined[B*51:01:01:02(1)]	0.00009
P01_02	undefined[B*51:02:01:03(1)]	0.00009
P01_02	undefined[B*51:01:01:02(1)]	0.00009
P01_02	undefined[B*51:01:01:02(1)]	0.00009
P01_02	undefined[B*51:01:01:02(1)]	0.00009
P01_02	B*52:79	0.00009
P01_02	B*35:01:01:05,B*35:01:01:06,B*35:01:01:16,B*35:01:01:19	0.00009
P01_02	undefined[B*51:01:01:02(1)]	0.00009
P01_02	undefined[B*52:01:01:05(1)]	0.00009
P01_02	undefined[B*52:01:01:01(1)]	0.00009
P01_02	undefined[B*51:01:01:02(1)]	0.00009
P01_02	undefined[B*35:21(10)]	0.00009
P01_02	undefined[B*78:01:01:03(1)]	0.00009
P01_02	B*51:01:71	0.00009
P01_02	B*51:01:01:21	0.00009
P01_02	undefined[B*51:02:02(10)]	0.00009
P01_02	undefined[B*52:01:01:05(1)]	0.00009
P01_02	undefined[B*51:06:01:03(1)]	0.00009
P01_02	B*51:09:01	0.00009
P01_02	undefined[B*51:01:01:02(1)]	0.00009
P01_02	undefined[B*51:01:01:02(1)]	0.00009
P01_02	undefined[B*51:01:01:01(1)]	0.00009
P01_02	undefined[B*51:01:01:02(1)]	0.00009
P01_02	undefined[B*52:01:02:04(1)]	0.00009
P01_02	undefined[B*51:01:01:02(1)]	0.00009
P01_02	undefined[B*51:01:01:01(1)]	0.00009
P01_03	B*53:01:01:01	0.00402

P01_03	undefined[B*53:01:01:01(1)]	0.00009
P01_03	undefined[B*53:01:01:02(1)]	0.00009
P01_03	undefined[B*53:01:01:02(1)]	0.00009
P01_04	B*35:01:01:05,B*35:01:01:06,B*35:01:01:16,B*35:01:01:19	0.00075
P01_04	undefined[B*35:01:01:01(1)]	0.00009
P01_04	undefined[B*35:01:01:07(1)]	0.00009
P01_05	B*52:01:01:18	0.00037
P01_05	undefined[B*52:01:01:07(1)]	0.00009
P01_06	B*51:32	0.00019
P01_07	B*51:01:01:36	0.00019
P01_08	B*51:01:01:59	0.00009
P01_08	B*51:01:01:59	0.00009
P01_09	B*35:01:01:05,B*35:01:01:06,B*35:01:01:16,B*35:01:01:19	0.00019
P01_10	undefined[B*35:03:01:01(1)]	0.00019
P01_11	B*35:01:01:02,B*35:01:01:49	0.00421
P01_11	B*35:01:01:05,B*35:01:01:06,B*35:01:01:16,B*35:01:01:19	0.00393
P01_11	B*35:05:01:02	0.00318
P01_11	B*35:43:01	0.00215
P01_11	B*35:12:01:01	0.00131
P01_11	B*35:17:01:01	0.00094
P01_11	B*35:04:01:01	0.00075
P01_11	undefined[B*35:10(1)]	0.00075
P01_11	B*35:01:01:51	0.00056
P01_11	B*35:20:01	0.00047
P01_11	B*35:14:01	0.00047
P01_11	B*35:06	0.00037
P01_11	B*35:22:01:02	0.00028
P01_11	B*35:09:01:01	0.00028
P01_11	B*35:11:01	0.00019
P01_11	undefined[B*35:01:01:07(1)]	0.00019
P01_11	B*35:05:01:03	0.00019
P01_11	B*35:01:01:60	0.00009
P01_11	B*35:12:03	0.00009
P01_11	undefined[B*35:04:01:02(1)]	0.00009
P01_11	undefined[B*35:04:01:02(1)]	0.00009
P01_11	undefined[B*35:01:01:07(1)]	0.00009
P01_11	undefined[B*35:01:01:05(1)]	0.00009
P01_11	undefined[B*35:01:01:02(1)]	0.00009
P01_11	undefined[B*35:01:01:07(1)]	0.00009
P01_11	undefined[B*35:01:01:07(1)]	0.00009
P01_11	undefined[B*35:135(1)]	0.00009
P01_11	undefined[B*35:01:01:51(10)]	0.00009
P01_11	undefined[B*35:05:01:02(1)]	0.00009
P01_11	undefined[B*35:459N(1)]	0.00009
P01_11	undefined[B*35:04:01:02(1)]	0.00009
P01_11	undefined[B*35:14:03(1)]	0.00009
P01_11	undefined[B*35:17:01:02(1)]	0.00009
P01_11	undefined[B*35:11:01(1)]	0.00009
P01_11	undefined[B*35:11:01(1)]	0.00009
P01_11	undefined[B*35:01:01:07(1)]	0.00009
P01_11	undefined[B*35:459N(1)]	0.00009
P01_11	undefined[B*35:04:01:01(1)]	0.00009
P01_11	undefined[B*35:01:01:51(10)]	0.00009
P01_12	B*52:01:01:01	0.00009
P01_12	B*51:01:01:01,B*51:01:01:04,B*51:01:01:05,B*51:01:01:06,B*51:01:01:09,B*51:01:01:10,B*51:01:01:11,B*51:01:01:13,B*51:01:01:34,B*51:01:01:84	0.00009
P01_12	undefined[B*51:01:01:01(1)]	0.00009
P01_13	B*51:01:01:01,B*51:01:01:04,B*51:01:01:05,B*51:01:01:06,B*51:01:01:09,B*51:01:01:10,B*51:01:01:11,B*51:01:01:13,B*51:01:01:34,B*51:01:01:84	0.00019
P01_13	B*52:01:01:02	0.00009
P01_14	B*58:01:01:01,B*58:01:01:03	0.00009
P01_14	B*35:03:01:03	0.00009
P01_14	B*35:01:01:05,B*35:01:01:06,B*35:01:01:16,B*35:01:01:19	0.00009
P01_15	B*51:01:01:03,B*51:01:01:12	0.00009
P01_16	undefined[B*51:01:01:02(1)]	0.00009
P01_17	B*35:03:01:01	0.00009
P01_18	B*35:01:01:05,B*35:01:01:06,B*35:01:01:16,B*35:01:01:19	0.00009
P01_19	B*35:03:01:01	0.00009
P01_20	undefined[B*53:01:01:01(1)]	0.00009
P01_21	undefined[B*51:01:01:01(1)]	0.00009
P01_22	B*35:03:01:08	0.00009
P01_23	B*51:02:01:01,B*51:02:01:02	0.00009
P01_24	B*35:08:01:01	0.00009
P01_25	B*35:08:01:01	0.00009
P01_26	B*58:01:01:10	0.00019

P01_27	undefined[B*58:01:01:01(1)]	0.00019
P01_28	B*52:01:02:02	0.00009
P01_29	undefined[B*35:01:01:07(1)]	0.00009
P01_30	B*35:03:01:01	0.00009
P01_31	B*53:01:01:01	0.00009
P01_32	B*53:01:01:01	0.00009
P01_33	B*35:01:01:05,B*35:01:01:06,B*35:01:01:16,B*35:01:01:19	0.00009
P01_34	B*51:01:01:01,B*51:01:01:04,B*51:01:01:05,B*51:01:01:06,B*51:01:01:09,B*51:01:01:10,B*51:01:01:11,B*51:01:01:13,B*51:01:01:14,B*51:01:01:84	0.00009
P01_35	B*51:01:02:01	0.00009
P01_36	B*35:03:01:01	0.00009
P01_37	B*35:01:01:02,B*35:01:01:49	0.00009
P01_37	B*35:05:01:02	0.00009
P01_38	undefined[B*35:11:01(1)]	0.00009
P01_39	B*58:01:01:01,B*58:01:01:03	0.00009
P01_39	B*53:01:01:01	0.00009
P01_40	B*35:01:01:05,B*35:01:01:06,B*35:01:01:16,B*35:01:01:19	0.00019
P01_41	B*35:01:01:05,B*35:01:01:06,B*35:01:01:16,B*35:01:01:19	0.00009
P01_42	B*58:02:01:01	0.00009
P01_42	B*35:01:01:05,B*35:01:01:06,B*35:01:01:16,B*35:01:01:19	0.00009
P01_43	B*58:01:01:01,B*58:01:01:03	0.00009
P01_44	undefined[B*51:01:01:100(1)]	0.00009
P01_45	undefined[B*15:01:01:07(100)]	0.00009
P01_46	undefined[B*15:01:01:02N(100)]	0.00009
P01_46	undefined[B*15:01:01:03(100)]	0.00009
P01_47	undefined[B*51:01:01:64(10)]	0.00009
P01_48	undefined[B*13:140(100)]	0.00009
P01_49	undefined[B*07:114(100)]	0.00009
P01_50	undefined[B*51:01:01:02(1)]	0.00009
P01_50	B*51:06:01:01	0.00009
P01_51	undefined[B*13:128(100)]	0.00009
P01_52	undefined[B*07:316N(100)]	0.00009
P01_53	undefined[B*13:03(100)]	0.00009
P01_54	undefined[B*13:02:30(100)]	0.00009
P01_55	B*51:01:01:01,B*51:01:01:04,B*51:01:01:05,B*51:01:01:06,B*51:01:01:09,B*51:01:01:10,B*51:01:01:11,B*51:01:01:13,B*51:01:01:14,B*51:01:01:84	0.00009
P01_56	undefined[B*35:01:01:03(1)]	0.00009
P01_57	undefined[B*53:01:01:03(1)]	0.00009
P01_58	undefined[B*07:359(100)]	0.00009
P01_58	undefined[B*07:114(100)]	0.00009
P01_59	B*51:01:02:01	0.00112
P02_01	B*57:01:01:01	0.02235
P02_01	B*57:03:01:02	0.00477
P02_01	B*57:03:01:01	0.00084
P02_01	undefined[B*57:01:01:07(1)]	0.00075
P02_01	B*57:02:01:01,B*57:02:01:03	0.00065
P02_01	undefined[B*57:01:01:01(1)]	0.00037
P02_01	undefined[B*57:01:01:01(1)]	0.00028
P02_01	undefined[B*57:01:01:07(1)]	0.00028
P02_01	B*57:04:01	0.00019
P02_01	undefined[B*57:01:01:01(1)]	0.00019
P02_01	undefined[B*57:01:01:01(1)]	0.00019
P02_01	undefined[B*57:01:01:07(1)]	0.00009
P02_01	undefined[B*57:02:01:04(1)]	0.00009
P02_01	undefined[B*57:05(10)]	0.00009
P02_01	undefined[B*57:02:01:04(1)]	0.00009
P02_01	undefined[B*57:01:01:01(1)]	0.00009
P02_01	undefined[B*57:01:01:07(1)]	0.00009
P02_01	undefined[B*57:01:01:01(1)]	0.00009
P02_01	undefined[B*57:01:01:07(1)]	0.00009
P02_01	undefined[B*57:03:01:02(1)]	0.00009
P02_01	undefined[B*57:01:01:07(1)]	0.00009
P02_01	undefined[B*57:02:01:01(1)]	0.00009
P02_01	undefined[B*57:03:01:01(1)]	0.00009
P02_01	undefined[B*08:181(100)]	0.00009
P02_01	undefined[B*57:05(10)]	0.00009
P02_01	undefined[B*57:01:01:07(1)]	0.00009
P02_01	undefined[B*57:02:01:04(1)]	0.00009
P02_01	undefined[B*57:01:01:07(1)]	0.00009
P02_01	undefined[B*57:01:01:07(1)]	0.00009
P02_01	undefined[B*57:01:01:07(1)]	0.00009
P02_01	undefined[B*57:01:01:01(1)]	0.00009
P02_02	B*57:03:01:05	0.00234
P02_02	undefined[B*08:01:01:41(100)]	0.00009
P02_02	undefined[B*57:03:01:04(1)]	0.00009

P02_02	undefined[B*57:03:01:04(1)]	0.00009
P02_03	undefined[B*57:02:01:04(1)]	0.00028
P02_03	undefined[B*57:02:01:04(1)]	0.00009
P02_04	undefined[B*57:03:01:01(1)]	0.00009
P02_05	undefined[B*13:01:01:01(100)]	0.00009
P02_06	B*57:01:01:01	0.00009
P02_07	undefined[B*57:01:01:07(1)]	0.00009
P02_08	B*57:01:01:01	0.00009
P02_09	B*57:01:01:01	0.00009
P03_01	B*49:01:01:01,B*49:01:01:04	0.01786
P03_01	B*45:01:01:01,B*45:01:01:03	0.01412
P03_01	B*50:01:01:01	0.01318
P03_01	B*41:01:01:01	0.00468
P03_01	B*41:02:01:01	0.00411
P03_01	B*50:02:01:01	0.00094
P03_01	B*50:01:01:02	0.00065
P03_01	B*49:01:01:02	0.00065
P03_01	B*41:03:01	0.00037
P03_01	undefined[B*50:01:01:03(1)]	0.00037
P03_01	undefined[B*45:01:01:02(1)]	0.00028
P03_01	B*41:04	0.00028
P03_01	undefined[B*49:01:01:01(1)]	0.00019
P03_01	undefined[B*41:01:01:01(1)]	0.00019
P03_01	undefined[B*41:01:01:01(1)]	0.00019
P03_01	B*45:07	0.00019
P03_01	undefined[B*41:02:01:01(10)]	0.00009
P03_01	undefined[B*15:16:01:07(100)]	0.00009
P03_01	undefined[B*50:01:01:01(1)]	0.00009
P03_01	undefined[B*49:76(1)]	0.00009
P03_01	undefined[B*41:01:01:04(1)]	0.00009
P03_01	undefined[B*07:129(100)]	0.00009
P03_01	undefined[B*45:01:01:02(1)]	0.00009
P03_01	undefined[B*49:01:01:03(1)]	0.00009
P03_01	undefined[B*50:01:01:08(1)]	0.00009
P03_01	undefined[B*07:436(100)]	0.00009
P03_01	undefined[B*49:01:01:03(1)]	0.00009
P03_01	undefined[B*45:01:01:08(10)]	0.00009
P03_01	undefined[B*45:01:01:02(1)]	0.00009
P03_01	undefined[B*07:05:01:04(100)]	0.00009
P03_01	undefined[B*45:01:01:02(1)]	0.00009
P03_01	undefined[B*07:14:02(100)]	0.00009
P03_01	undefined[B*41:01:01:01(1)]	0.00009
P03_01	undefined[B*49:01:01:01(1)]	0.00009
P03_01	undefined[B*45:01:01:01(10)]	0.00009
P03_01	undefined[B*41:02:01:01(1)]	0.00009
P03_01	undefined[B*41:02:01:02(1)]	0.00009
P03_01	undefined[B*07:114(100)]	0.00009
P03_01	undefined[B*50:01:01:03(1)]	0.00009
P03_01	B*40:01:02:01,B*40:01:02:04,B*40:01:02:06,B*40:01:02:11,B*40:01:02:33,B*40:01:02:34,B*40:01:02:40,B*40:01:02:41	0.00009
P03_01	B*41:01:01:04	0.00009
P03_01	B*40:16:01:01	0.00009
P03_01	undefined[B*49:01:01:03(1)]	0.00009
P03_01	B*41:01:01:06	0.00009
P03_01	undefined[B*49:01:01:01(1)]	0.00009
P03_01	B*41:02:01:05	0.00009
P03_02	B*40:01:02:01,B*40:01:02:04,B*40:01:02:06,B*40:01:02:11,B*40:01:02:33,B*40:01:02:34,B*40:01:02:40,B*40:01:02:41	0.02244
P03_02	undefined[B*40:01:02:14(1)]	0.00047
P03_02	undefined[B*40:01:02:14(1)]	0.00028
P03_02	undefined[B*40:01:02:01(1)]	0.00028
P03_02	B*40:23	0.00019
P03_02	B*40:01:02:47	0.00019
P03_02	undefined[B*40:01:02:01(1)]	0.00019
P03_02	B*40:01:02:50	0.00019
P03_02	undefined[B*40:01:02:14(1)]	0.00019
P03_02	B*40:01:02:10	0.00019
P03_02	undefined[B*40:01:02:14(1)]	0.00019
P03_02	undefined[B*40:01:02:14(1)]	0.00009
P03_02	undefined[B*40:01:02:01(1)]	0.00009
P03_02	undefined[B*40:01:02:14(1)]	0.00009
P03_02	B*40:150	0.00009
P03_02	undefined[B*40:01:02:01(1)]	0.00009
P03_02	undefined[B*40:01:02:14(1)]	0.00009
P03_03	B*40:01:02:01,B*40:01:02:04,B*40:01:02:06,B*40:01:02:11,B*40:01:02:33,B*40:01:02:34,B*40:01:02:40,B*40:01:02:41	0.00458
P03_03	undefined[B*40:01:02:14(1)]	0.00009

P03_03	undefined[B*40:01:02:14(1)]	0.00009
P03_04	undefined[B*45:01:01:02(1)]	0.00009
P03_04	B*45:01:01:01,B*45:01:01:03	0.00009
P03_05	B*40:01:02:01,B*40:01:02:04,B*40:01:02:06,B*40:01:02:11,B*40:01:02:33,B*40:01:02:34,B*40:01:02:40,B*40:01:02:41	0.00019
P03_06	B*40:01:02:01,B*40:01:02:04,B*40:01:02:06,B*40:01:02:11,B*40:01:02:33,B*40:01:02:34,B*40:01:02:40,B*40:01:02:41	0.00019
P03_07	B*40:01:02:01,B*40:01:02:04,B*40:01:02:06,B*40:01:02:11,B*40:01:02:33,B*40:01:02:34,B*40:01:02:40,B*40:01:02:41	0.00009
P03_08	B*50:01:01:01	0.00009
P03_09	B*50:01:01:01	0.00009
P03_10	B*41:02:01:01	0.00009
P03_11	B*40:01:02:01,B*40:01:02:04,B*40:01:02:06,B*40:01:02:11,B*40:01:02:33,B*40:01:02:34,B*40:01:02:40,B*40:01:02:41	0.00009
P04_01	B*15:01:01:01,B*15:01:01:48	0.01964
P04_01	B*46:01:01:01	0.01711
P04_01	B*15:03:01:02	0.01384
P04_01	B*15:10:01:01,B*15:10:01:02,B*15:10:01:05	0.01150
P04_01	B*15:18:01:02,B*15:18:01:05	0.00449
P04_01	B*15:04:01:02	0.00243
P04_01	B*15:08:01:01	0.00224
P04_01	B*15:01:01:04	0.00206
P04_01	B*15:05:01:01	0.00159
P04_01	B*15:11:01	0.00131
P04_01	B*15:220:01:01	0.00131
P04_01	B*15:04:01:01	0.00094
P04_01	undefined[B*15:03:01:01(1)]	0.00084
P04_01	B*15:12:01	0.00075
P04_01	B*15:20	0.00075
P04_01	undefined[B*46:01:01:02(1)]	0.00075
P04_01	B*15:15:01:01	0.00065
P04_01	B*15:07:01:01	0.00047
P04_01	B*15:18:01:03	0.00047
P04_01	B*15:01:01:06	0.00037
P04_01	undefined[B*46:01:01:02(1)]	0.00037
P04_01	undefined[B*15:01:01:14(1)]	0.00037
P04_01	B*15:04:04	0.00037
P04_01	B*15:27:01:01	0.00037
P04_01	undefined[B*15:10:01:03(1)]	0.00037
P04_01	B*15:32:01	0.00037
P04_01	B*15:03:01:01	0.00028
P04_01	undefined[B*15:01:01:14(1)]	0.00028
P04_01	B*15:450	0.00028
P04_01	undefined[B*15:03:01:01(1)]	0.00028
P04_01	undefined[B*15:09:01(10)]	0.00028
P04_01	undefined[B*15:153(1)]	0.00028
P04_01	B*15:09:01	0.00028
P04_01	B*15:37	0.00028
P04_01	undefined[B*15:03:01:01(1)]	0.00028
P04_01	undefined[B*46:01:01:02(1)]	0.00028
P04_01	undefined[B*15:03:01:01(1)]	0.00019
P04_01	undefined[B*15:03:01:01(1)]	0.00019
P04_01	B*15:01:01:16	0.00019
P04_01	undefined[B*46:01:01:01(1)]	0.00019
P04_01	undefined[B*15:03:01:01(1)]	0.00019
P04_01	B*15:40:01	0.00019
P04_01	B*40:12:01	0.00019
P04_01	B*15:47:01	0.00019
P04_01	undefined[B*15:01:01:10(1)]	0.00009
P04_01	undefined[B*15:10:01:01(1)]	0.00009
P04_01	undefined[B*46:01:01:02(1)]	0.00009
P04_01	undefined[B*15:10:01:03(1)]	0.00009
P04_01	undefined[B*15:08:01:01(10)]	0.00009
P04_01	undefined[B*15:01:01:08(1)]	0.00009
P04_01	B*15:03:01:09	0.00009
P04_01	B*15:39:01:02	0.00009
P04_01	undefined[B*15:05:01:02(1)]	0.00009
P04_01	undefined[B*15:01:01:05(10)]	0.00009
P04_01	undefined[B*15:04:01:03(1)]	0.00009
P04_01	undefined[B*15:499(1)]	0.00009
P04_01	undefined[B*15:153(1)]	0.00009
P04_01	undefined[B*46:01:01:02(1)]	0.00009
P04_01	B*15:10:06	0.00009
P04_01	undefined[B*46:01:01:01(1)]	0.00009
P04_01	undefined[B*15:08:01:01(1)]	0.00009
P04_01	undefined[B*15:10:01:01(1)]	0.00009
P04_01	undefined[B*15:03:11(10)]	0.00009
P04_01	B*46:01:01:02	0.00009

P04_01	undefined[B*15:01:01:01(1)]	0.00009
P04_01	undefined[B*46:01:01:02(1)]	0.00009
P04_01	undefined[B*15:01:01:12(10)]	0.00009
P04_01	undefined[B*15:153(1)]	0.00009
P04_01	undefined[B*15:04:01:02(10)]	0.00009
P04_01	undefined[B*15:07:01:01(1)]	0.00009
P04_01	undefined[B*13:01:10(100)]	0.00009
P04_01	B*15:29:01:01	0.00009
P04_01	undefined[B*15:03:01:01(1)]	0.00009
P04_01	undefined[B*15:03:01:01(1)]	0.00009
P04_01	B*15:35:01:01	0.00009
P04_01	B*15:24:01	0.00009
P04_01	undefined[B*15:10:01:01(1)]	0.00009
P04_01	B*15:39:01:01	0.00009
P04_01	undefined[B*15:01:01:01(1)]	0.00009
P04_01	B*46:01:01:02	0.00009
P04_01	undefined[B*15:01:01:01(1)]	0.00009
P04_01	undefined[B*15:10:01:01(1)]	0.00009
P04_01	undefined[B*15:01:01:10(1)]	0.00009
P04_01	B*15:52	0.00009
P04_01	undefined[B*46:01:01:01(1)]	0.00009
P04_01	undefined[B*15:01:01:01(1)]	0.00009
P04_01	undefined[B*15:01:01:01(1)]	0.00009
P04_01	undefined[B*15:03:01:01(1)]	0.00009
P04_02	B*15:02:01:01,B*15:02:01:05	0.01085
P04_02	B*15:25:01:01	0.00196
P04_02	B*15:06	0.00056
P04_02	undefined[B*15:02:01:01(1)]	0.00028
P04_02	B*15:21:01:01	0.00019
P04_02	undefined[B*15:02:01:01(1)]	0.00019
P04_02	undefined[B*15:25:04(1)]	0.00019
P04_02	B*15:31:01:02	0.00009
P04_02	undefined[B*15:02:01:01(10)]	0.00009
P04_02	undefined[B*15:02:01:02(1)]	0.00009
P04_02	B*15:13:01	0.00009
P04_02	undefined[B*15:02:01:02(1)]	0.00009
P04_02	undefined[B*15:25:04(1)]	0.00009
P04_03	B*15:17:01:01,B*15:17:01:03	0.00645
P04_03	undefined[B*15:17:01:01(1)]	0.00009
P04_04	B*15:16:01:02	0.00337
P04_04	undefined[B*15:16:01:02(1)]	0.00009
P04_04	undefined[B*15:16:01:02(1)]	0.00009
P04_04	B*40:26	0.00009
P04_05	B*15:37	0.00019
P04_06	B*15:16:01:02	0.00009
P04_07	B*15:02:01:01,B*15:02:01:05	0.00009
P04_08	B*15:18:01:02,B*15:18:01:05	0.00009
P04_09	B*15:09:01	0.00009
P04_10	undefined[B*15:01:01:10(1)]	0.00009
P04_11	B*15:01:01:01,B*15:01:01:48	0.00009
P04_12	B*15:18:01:02,B*15:18:01:05	0.00009
P04_13	B*15:01:01:01,B*15:01:01:48	0.00009
P04_14	B*15:18:01:02,B*15:18:01:05	0.00009
P04_15	undefined[B*49:01:01:09(100)]	0.00009
P04_16	B*15:18:01:02,B*15:18:01:05	0.00009
P04_17	B*15:01:01:01,B*15:01:01:48	0.00009
P04_19	B*15:220:01:01	0.00009
P04_20	B*15:32:01	0.00037
P05_01	B*82:01:01:01	0.00075
P05_02	B*82:02:01:02	0.00037
P05_02	undefined[B*82:02:01:02(1)]	0.00009
P06_01	B*55:01:01:01	0.00804
P06_01	B*56:01:01:04	0.00458
P06_01	B*54:01:01:01,B*54:01:01:05	0.00402
P06_01	B*55:02:01:04	0.00206
P06_01	B*55:02:01:07	0.00075
P06_01	B*59:01:01:01	0.00075
P06_01	undefined[B*56:01:01:01(1)]	0.00047
P06_01	undefined[B*55:01:01:01(1)]	0.00037
P06_01	B*56:01:01:01	0.00037
P06_01	undefined[B*55:01:01:05(1)]	0.00028
P06_01	undefined[B*56:01:01:01(1)]	0.00028
P06_01	undefined[B*54:01:01:01(1)]	0.00028
P06_01	B*55:01:01:05	0.00019

P06_01	undefined[B*56:01:01:01(1)]	0.00019
P06_01	undefined[B*54:01:01:02(1)]	0.00019
P06_01	undefined[B*55:01:01:05(1)]	0.00019
P06_01	undefined[B*55:02:11(1)]	0.00019
P06_01	undefined[B*55:01:01:05(1)]	0.00019
P06_01	B*56:04:01:01	0.00019
P06_01	undefined[B*55:01:01:05(1)]	0.00019
P06_01	undefined[B*55:02:01:04(1)]	0.00009
P06_01	undefined[B*55:01:01:01(1)]	0.00009
P06_01	undefined[B*56:04:01:01(1)]	0.00009
P06_01	B*56:02:01:01	0.00009
P06_01	undefined[B*55:02:01:04(1)]	0.00009
P06_01	undefined[B*55:01:01:05(1)]	0.00009
P06_01	undefined[B*54:01:01:02(1)]	0.00009
P06_01	undefined[B*55:01:01:05(1)]	0.00009
P06_01	undefined[B*56:01:01:01(1)]	0.00009
P06_01	B*55:01:01:08	0.00009
P06_01	undefined[B*54:01:01:02(1)]	0.00009
P06_01	undefined[B*54:01:01:02(1)]	0.00009
P06_01	undefined[B*55:02:11(1)]	0.00009
P06_01	undefined[B*54:01:01:02(1)]	0.00009
P06_01	undefined[B*55:02:11(1)]	0.00009
P06_01	undefined[B*54:01:01:02(1)]	0.00009
P06_02	B*56:02:01:01	0.00056
P06_03	B*56:01:01:04	0.00028
P06_04	undefined[B*55:01:01:05(1)]	0.00009
P06_04	B*55:01:01:19	0.00009
P06_05	undefined[B*55:01:01:05(1)]	0.00009
P06_06	undefined[B*55:01:01:05(1)]	0.00009
P06_07	B*55:01:01:01	0.00009
P07_01	B*47:01:01:03,B*47:01:01:06	0.00168
P07_02	B*47:01:01:03,B*47:01:01:06	0.00037
P07_02	B*47:03	0.00028
P07_03	B*47:01:01:03,B*47:01:01:06	0.00009
P08_01	B*13:02:01:01	0.01290
P08_01	B*13:01:01:01,B*13:01:01:02	0.00870
P08_01	B*13:02:01:07	0.00150
P08_01	B*13:01:01:07	0.00028
P08_01	undefined[B*13:01:01:01(1)]	0.00028
P08_01	undefined[B*13:02:01:06(1)]	0.00019
P08_01	undefined[B*13:01:01:01(1)]	0.00019
P08_01	undefined[B*13:02:01:01(1)]	0.00019
P08_01	undefined[B*13:02:01:01(1)]	0.00019
P08_01	undefined[B*13:02:01:01(1)]	0.00019
P08_01	undefined[B*13:01:01:01(1)]	0.00019
P08_01	B*13:01:01:03	0.00019
P08_01	undefined[B*13:01:01:04(1)]	0.00019
P08_01	undefined[B*13:02:01:06(1)]	0.00009
P08_01	undefined[B*13:02:01:01(1)]	0.00009
P08_01	undefined[B*13:02:01:01(1)]	0.00009
P08_01	undefined[B*13:02:01:06(1)]	0.00009
P08_01	undefined[B*13:02:01:06(1)]	0.00009
P08_01	undefined[B*07:343N(100)]	0.00009
P08_01	undefined[B*13:02:01:01(1)]	0.00009
P08_01	undefined[B*13:02:01:01(1)]	0.00009
P08_01	undefined[B*13:01:01:04(1)]	0.00009
P08_01	undefined[B*13:02:01:02(1)]	0.00009
P08_02	B*13:02:01:01	0.00009
P08_03	B*13:02:01:01	0.00009
P09_01	B*44:03:01:01,B*44:03:01:10,B*44:03:01:19	0.03413
P09_01	B*44:02:01:01,B*44:02:01:20,B*44:02:01:55	0.02085
P09_01	B*44:03:02:01,B*44:03:02:04	0.00991
P09_01	B*44:02:01:03	0.00234
P09_01	B*44:03:01:02	0.00112
P09_01	B*44:05:01:01	0.00103
P09_01	B*44:10	0.00094
P09_01	B*44:03:01:16,B*44:03:01:17	0.00094
P09_01	B*44:27:01:01	0.00056
P09_01	undefined[B*44:03:01:21(1)]	0.00037
P09_01	undefined[B*44:03:01:01(1)]	0.00037
P09_01	undefined[B*44:02:01:07(1)]	0.00037
P09_01	B*44:02:01:35	0.00019
P09_01	undefined[B*44:03:01:01(1)]	0.00019
P09_01	B*44:03:01:09	0.00019

P09_01	undefined[B*44:02:01:02S(1)]	0.00019
P09_01	undefined[B*44:03:01:21(1)]	0.00019
P09_01	undefined[B*44:03:02:01(1)]	0.00019
P09_01	undefined[B*44:03:01:01(1)]	0.00019
P09_01	B*44:02:01:05	0.00019
P09_01	undefined[B*44:02:01:01(1)]	0.00019
P09_01	B*44:02:01:43	0.00019
P09_01	undefined[B*44:03:02:03(1)]	0.00019
P09_01	undefined[B*44:03:02:01(1)]	0.00019
P09_01	B*44:03:01:23	0.00019
P09_01	B*44:03:01:28	0.00019
P09_01	undefined[B*44:05:01:01(1)]	0.00019
P09_01	undefined[B*44:02:01:01(1)]	0.00009
P09_01	undefined[B*44:03:01:01(1)]	0.00009
P09_01	undefined[B*44:03:01:01(1)]	0.00009
P09_01	undefined[B*44:03:01:01(1)]	0.00009
P09_01	undefined[B*44:03:01:21(1)]	0.00009
P09_01	undefined[B*44:02:01:46(10)]	0.00009
P09_01	undefined[B*44:03:01:01(1)]	0.00009
P09_01	undefined[B*44:02:01:17(10)]	0.00009
P09_01	undefined[B*44:02:01:07(1)]	0.00009
P09_01	undefined[B*44:03:01:21(1)]	0.00009
P09_01	B*44:03:01:38	0.00009
P09_01	B*44:10	0.00009
P09_01	undefined[B*44:03:01:21(1)]	0.00009
P09_01	undefined[B*44:02:01:01(1)]	0.00009
P09_01	undefined[B*44:02:01:01(1)]	0.00009
P09_01	undefined[B*44:02:01:01(1)]	0.00009
P09_01	undefined[B*44:02:01:01(1)]	0.00009
P09_01	undefined[B*44:03:01:21(1)]	0.00009
P09_01	undefined[B*44:03:02:03(1)]	0.00009
P09_01	undefined[B*44:03:01:21(1)]	0.00009
P09_01	undefined[B*44:03:02:01(10)]	0.00009
P09_01	B*44:03:01:23	0.00009
P09_01	undefined[B*44:02:01:07(1)]	0.00009
P09_01	B*44:03:01:03	0.00009
P09_01	undefined[B*44:03:02:03(1)]	0.00009
P09_01	B*44:03:01:23	0.00009
P09_01	B*44:02:01:34	0.00009
P09_01	undefined[B*44:02:01:18(10)]	0.00009
P09_01	undefined[B*44:03:02:01(1)]	0.00009
P09_01	undefined[B*44:03:02:03(1)]	0.00009
P09_01	B*44:03:01:12	0.00009
P09_01	undefined[B*44:03:01:21(10)]	0.00009
P09_01	undefined[B*44:50:03(1)]	0.00009
P09_02	B*44:02:01:01,B*44:02:01:20,B*44:02:01:55	0.00075
P09_02	undefined[B*44:02:01:07(1)]	0.00009
P09_03	B*44:03:01:01,B*44:03:01:10,B*44:03:01:19	0.00037
P09_04	B*44:02:01:01,B*44:02:01:20,B*44:02:01:55	0.00019
P09_04	B*44:03:01:01,B*44:03:01:10,B*44:03:01:19	0.00009
P09_05	undefined[B*44:03:02:01(1)]	0.00019
P09_06	undefined[B*44:02:01:23(1)]	0.00009
P09_07	undefined[B*13:02:01:04(100)]	0.00009
P09_08	B*44:03:01:01,B*44:03:01:10,B*44:03:01:19	0.00009
P09_10	B*44:02:01:03	0.00009
P09_11	B*44:03:01:01,B*44:03:01:10,B*44:03:01:19	0.00009
P09_12	B*44:02:01:01,B*44:02:01:20,B*44:02:01:55	0.00009
P09_13	B*44:02:01:01,B*44:02:01:20,B*44:02:01:55	0.00009
P09_14	undefined[B*44:02:01:01(1)]	0.00009
P10_01	B*73:01:01:01	0.00056
P10_02	B*73:01:01:01	0.00009
P11_01	B*07:02:01:01,B*07:02:01:13,B*07:02:01:14,B*07:02:01:16,B*07:02:01:85,B*07:02:01:86	0.05162
P11_01	B*48:01:01:01,B*48:01:01:02	0.00524
P11_01	B*07:05:01:01,B*07:05:01:03	0.00430
P11_01	B*81:01:01:01	0.00421
P11_01	B*07:06:01:01	0.00374
P11_01	B*48:02:01	0.00084
P11_01	B*48:03:01:03	0.00075
P11_01	undefined[B*07:02:01:100(1)]	0.00056
P11_01	undefined[B*07:05:01:02(1)]	0.00047
P11_01	B*07:06:01:03	0.00037
P11_01	undefined[B*07:02:01:01(1)]	0.00037
P11_01	undefined[B*07:02:01:100(1)]	0.00028
P11_01	undefined[B*07:02:01:01(1)]	0.00028

P11_01	undefined[B*81:01:01:01(1)]	0.00028
P11_01	B*48:04:01:01	0.00028
P11_01	undefined[B*48:01:01:03(1)]	0.00019
P11_01	B*07:02:01:39	0.00019
P11_01	B*07:14:01	0.00019
P11_01	undefined[B*48:01:01:01(1)]	0.00019
P11_01	undefined[B*48:01:01:01(1)]	0.00019
P11_01	undefined[B*07:02:01:100(1)]	0.00019
P11_01	B*07:02:01:41	0.00019
P11_01	undefined[B*07:02:01:100(1)]	0.00009
P11_01	undefined[B*07:05:01:01(1)]	0.00009
P11_01	undefined[B*48:04:01:01(1)]	0.00009
P11_01	undefined[B*42:16:02(10)]	0.00009
P11_01	B*48:02:01	0.00009
P11_01	undefined[B*48:01:01:03(1)]	0.00009
P11_01	undefined[B*48:01:01:01(1)]	0.00009
P11_01	B*07:06:01:01	0.00009
P11_01	undefined[B*07:02:01:100(1)]	0.00009
P11_01	undefined[B*07:06:01:04(1)]	0.00009
P11_01	undefined[B*48:01:01:01(1)]	0.00009
P11_01	B*48:02:01	0.00009
P11_01	undefined[B*81:01:01:01(1)]	0.00009
P11_01	B*48:02:01	0.00009
P11_01	B*48:05	0.00009
P11_01	undefined[B*07:02:01:100(1)]	0.00009
P11_01	undefined[B*07:02:01:05(1)]	0.00009
P11_01	undefined[B*48:01:01:01(1)]	0.00009
P11_01	B*81:02:01	0.00009
P11_01	undefined[B*81:01:01:02(1)]	0.00009
P11_01	undefined[B*07:02:01:100(1)]	0.00009
P11_01	B*48:43	0.00009
P11_01	undefined[B*07:05:01:01(1)]	0.00009
P11_01	B*48:04:01:02	0.00009
P11_01	undefined[B*07:02:01:01(1)]	0.00009
P11_01	B*48:02:01	0.00009
P11_02	B*48:02:01	0.00028
P11_02	B*48:02:01	0.00009
P11_02	B*48:02:01	0.00009
P11_03	B*42:01:01:01	0.01085
P11_03	B*42:02:01:02	0.00243
P11_03	undefined[B*42:01:01:02(1)]	0.00037
P11_03	undefined[B*42:01:01:02(1)]	0.00037
P11_03	undefined[B*42:01:01:01(1)]	0.00028
P11_03	undefined[B*42:01:01:02(1)]	0.00019
P11_03	undefined[B*42:01:01:02(1)]	0.00009
P11_03	undefined[B*42:01:01:02(1)]	0.00009
P11_03	undefined[B*42:02:02(1)]	0.00009
P11_03	undefined[B*42:01:01:01(1)]	0.00009
P11_04	B*07:13	0.00009
P11_05	B*07:02:01:01,B*07:02:01:13,B*07:02:01:14,B*07:02:01:16,B*07:02:01:85,B*07:02:01:86	0.00009
P11_06	B*07:02:01:01,B*07:02:01:13,B*07:02:01:14,B*07:02:01:16,B*07:02:01:85,B*07:02:01:86	0.00009
P11_07	undefined[B*13:02:01:06(100)]	0.00009
P11_08	undefined[B*13:125(100)]	0.00009
P11_09	B*42:01:01:01	0.00009
P12_01	B*08:01:01:01,B*08:01:01:16	0.02815
P12_01	B*08:01:01:02	0.01150
P12_01	B*08:01:01:37	0.00065
P12_01	undefined[B*08:01:01:10(1)]	0.00056
P12_01	undefined[B*08:01:01:10(1)]	0.00028
P12_01	undefined[B*08:01:01:01(1)]	0.00028
P12_01	undefined[B*08:01:01:02(1)]	0.00019
P12_01	undefined[B*08:01:01:10(1)]	0.00019
P12_01	undefined[B*08:01:01:10(1)]	0.00019
P12_01	undefined[B*08:01:01:01(1)]	0.00009
P12_01	undefined[B*08:01:01:01(1)]	0.00009
P12_01	undefined[B*08:01:01:10(1)]	0.00009
P12_01	undefined[B*08:01:01:02(1)]	0.00009
P12_01	undefined[B*08:01:01:10(1)]	0.00009
P12_01	undefined[B*08:01:01:10(1)]	0.00009
P12_01	undefined[B*08:01:01:02(1)]	0.00009
P12_02	B*08:01:01:02	0.00009
P12_02	B*08:01:01:01,B*08:01:01:16	0.00009
P12_03	undefined[B*08:01:01:18(1)]	0.00009
P12_04	undefined[B*08:02(10)]	0.00009

P12_05	B*48:01:01:01,B*48:01:01:02	0.00009
P13_01	B*14:02:01:01	0.01758
P13_01	B*14:01:01:01	0.00561
P13_01	undefined[B*14:02:01:04(1)]	0.00103
P13_01	B*14:03	0.00065
P13_01	B*14:02:01:03	0.00047
P13_01	undefined[B*14:02:01:01(1)]	0.00037
P13_01	undefined[B*14:02:01:04(1)]	0.00019
P13_01	undefined[B*14:02:01:04(1)]	0.00019
P13_01	undefined[B*14:02:01:04(1)]	0.00009
P13_01	undefined[B*14:02:01:04(1)]	0.00009
P13_01	undefined[B*14:02:01:04(1)]	0.00009
P13_01	undefined[B*14:02:01:04(1)]	0.00009
P13_01	B*14:02:02	0.00009
P13_01	undefined[B*14:02:01:04(1)]	0.00009
P13_01	undefined[B*14:01:01:04(1)]	0.00009
P13_01	undefined[B*14:01:01:01(1)]	0.00009
P13_01	undefined[B*14:02:01:04(1)]	0.00009
P13_01	undefined[B*14:02:01:04(1)]	0.00009
P13_01	undefined[B*14:02:01:04(1)]	0.00009
P13_01	B*14:85N	0.00009
P13_01	undefined[B*14:01:01:04(1)]	0.00009
P13_01	undefined[B*14:02:01:04(1)]	0.00009
P13_01	undefined[B*14:03(1)]	0.00009
P13_01	undefined[B*14:01:01:01(1)]	0.00009
P13_01	B*14:64	0.00009
P13_01	undefined[B*14:02:01:01(1)]	0.00009
P13_01	undefined[B*14:02:01:04(1)]	0.00009
P13_01	undefined[B*14:02:01:04(1)]	0.00009
P13_01	undefined[B*14:02:01:04(1)]	0.00009
P13_02	B*14:02:01:01	0.00009
P13_03	undefined[B*14:02:01:01(1)]	0.00009
P13_04	B*14:02:01:01	0.00009
P13_05	B*14:02:01:01	0.00009
P14_01	B*38:01:01:01,B*38:01:01:09	0.00963
P14_01	B*38:02:01:01	0.00664
P14_01	B*39:01:01:03,B*39:01:01:05,B*39:01:01:17,B*39:01:01:23	0.00655
P14_01	B*39:06:02:01	0.00281
P14_01	B*39:10:01	0.00224
P14_01	B*39:09:01:01	0.00084
P14_01	B*39:05:01:02	0.00075
P14_01	B*39:01:03:01,B*39:01:03:02	0.00065
P14_01	B*39:02:02:04	0.00065
P14_01	B*39:11	0.00065
P14_01	B*67:01:01	0.00056
P14_01	undefined[B*38:01:01:05(1)]	0.00047
P14_01	B*39:03:01:01	0.00037
P14_01	B*39:12:01:02	0.00037
P14_01	B*39:24:01	0.00037
P14_01	B*39:13:01	0.00037
P14_01	undefined[B*38:01:01:05(1)]	0.00028
P14_01	undefined[B*38:02:01:03(1)]	0.00019
P14_01	undefined[B*38:01:01:05(10)]	0.00019
P14_01	B*39:08	0.00019
P14_01	undefined[B*39:158(1)]	0.00019
P14_01	B*39:06:02:03	0.00019
P14_01	undefined[B*39:01:28(10)]	0.00009
P14_01	undefined[B*39:06:02:05(1)]	0.00009
P14_01	B*39:14:01:03	0.00009
P14_01	undefined[B*39:06:02:05(1)]	0.00009
P14_01	B*39:13:01	0.00009
P14_01	B*39:14:01:03	0.00009
P14_01	undefined[B*38:02:01:03(1)]	0.00009
P14_01	B*39:02:01:01	0.00009
P14_01	B*67:01:02	0.00009
P14_01	undefined[B*39:03:01:03(1)]	0.00009
P14_01	undefined[B*38:01:01:05(1)]	0.00009
P14_01	undefined[B*39:01:01:10(1)]	0.00009
P14_01	undefined[B*39:01:01:10(1)]	0.00009
P14_01	undefined[B*39:10:01(1)]	0.00009
P14_01	undefined[B*39:01:01:10(1)]	0.00009
P14_01	B*39:31:01:02	0.00009
P14_01	B*39:13:01	0.00009
P14_01	undefined[B*38:01:01:01(1)]	0.00009

P14_01	undefined[B*38:01:01:05(1)]	0.00009
P14_01	undefined[B*39:162(10)]	0.00009
P14_01	undefined[B*39:01:01:10(1)]	0.00009
P14_01	undefined[B*38:01:01:05(1)]	0.00009
P14_01	undefined[B*39:01:01:10(1)]	0.00009
P14_01	undefined[B*39:01:01:03(1)]	0.00009
P14_01	undefined[B*39:01:01:10(1)]	0.00009
P14_01	undefined[B*38:01:01:05(10)]	0.00009
P14_01	undefined[B*38:01:01:05(1)]	0.00009
P14_01	undefined[B*39:06:02:05(1)]	0.00009
P14_01	undefined[B*38:01:01:05(1)]	0.00009
P14_01	B*38:06	0.00009
P14_01	undefined[B*38:01:01:05(1)]	0.00009
P14_01	undefined[B*38:01:01:05(1)]	0.00009
P14_01	undefined[B*38:01:08(10)]	0.00009
P14_01	undefined[B*38:17(10)]	0.00009
P14_01	undefined[B*39:158(1)]	0.00009
P14_01	undefined[B*39:01:01:10(1)]	0.00009
P14_02	B*39:05:01:01	0.00290
P14_02	B*39:06:02:02	0.00112
P14_02	B*39:06:01:01	0.00075
P14_02	undefined[B*39:01:01:07(1)]	0.00028
P14_02	B*39:37:01:02	0.00009
P14_02	undefined[B*39:06:02:08(1)]	0.00009
P14_02	undefined[B*39:05:01:04(1)]	0.00009
P14_02	undefined[B*39:05:01:04(1)]	0.00009
P14_02	undefined[B*13:02:09(100)]	0.00009
P14_02	B*39:09:01:02	0.00009
P14_03	B*67:01:02	0.00019
P14_03	undefined[B*15:01:01:10(100)]	0.00009
P14_03	B*39:01:01:03,B*39:01:01:05,B*39:01:01:17,B*39:01:01:23	0.00009
P14_04	B*39:01:01:12	0.00009
P14_04	B*39:01:01:03,B*39:01:01:05,B*39:01:01:17,B*39:01:01:23	0.00009
P14_05	B*39:06:02:03	0.00009
P14_06	B*38:02:01:01	0.00009
P14_07	B*39:03:01:01	0.00009
P14_08	B*67:01:02	0.00009
P14_09	B*39:05:01:01	0.00009
P14_10	B*39:10:01	0.00009
P14_11	B*39:06:02:03	0.00009
P14_12	B*38:02:01:01	0.00009
P15_01	B*18:01:01:02,B*18:01:01:05,B*18:01:01:17,B*18:01:01:20,B*18:01:01:52	0.01842
P15_01	undefined[B*18:01:01:10(1)]	0.00037
P15_01	undefined[B*18:01:01:02(1)]	0.00019
P15_01	undefined[B*18:01:01:10(1)]	0.00019
P15_01	B*18:06	0.00019
P15_01	undefined[B*18:01:01:02(1)]	0.00019
P15_01	undefined[B*18:01:01:07(1)]	0.00009
P15_01	undefined[B*18:01:01:10(1)]	0.00009
P15_01	B*18:01:01:36	0.00009
P15_01	B*18:05:01:02	0.00009
P15_01	undefined[B*18:01:01:02(1)]	0.00009
P15_01	undefined[B*18:01:01:10(1)]	0.00009
P15_01	undefined[B*18:01:01:10(1)]	0.00009
P15_01	undefined[B*18:05:01:01(1)]	0.00009
P15_01	undefined[B*07:02:01:66(100)]	0.00009
P15_01	undefined[B*18:01:01:10(1)]	0.00009
P15_01	undefined[B*18:01:01:10(1)]	0.00009
P15_01	undefined[B*18:01:01:10(1)]	0.00009
P15_01	undefined[B*18:01:01:10(1)]	0.00009
P15_01	undefined[B*18:01:01:02(1)]	0.00009
P15_01	undefined[B*18:01:01:10(1)]	0.00009
P15_01	undefined[B*18:01:01:10(1)]	0.00009
P15_02	B*18:01:01:01,B*18:01:01:06,B*18:01:01:51	0.01253
P15_02	undefined[B*18:01:01:21(1)]	0.00019
P15_02	undefined[B*18:01:01:21(1)]	0.00019
P15_02	undefined[B*18:01:01:21(1)]	0.00009
P15_02	undefined[B*18:01:01:21(1)]	0.00009
P15_02	B*18:03:01:03	0.00009
P15_02	B*18:01:01:03	0.00009
P15_02	undefined[B*18:01:01:03(1)]	0.00009
P15_02	undefined[B*18:01:01:21(1)]	0.00009
P15_02	B*18:01:01:18	0.00009
P15_02	undefined[B*18:01:01:21(1)]	0.00009

P15_02	undefined[B*18:02:01(10)]	0.00009
P15_02	B*18:03:01:02	0.00009
P15_02	undefined[B*18:01:01:21(1)]	0.00009
P15_02	undefined[B*18:01:01:21(1)]	0.00009
P15_02	B*18:01:02	0.00009
P15_02	undefined[B*18:01:01:01(1)]	0.00009
P15_02	undefined[B*18:01:01:01(1)]	0.00009
P15_02	undefined[B*18:01:01:01(1)]	0.00009
P15_02	undefined[B*18:01:01:21(1)]	0.00009
P15_02	undefined[B*18:01:01:21(1)]	0.00009
P15_03	B*18:01:01:03	0.00047
P15_03	undefined[B*18:01:01:31(1)]	0.00009
P15_04	undefined[B*18:01:01:21(1)]	0.00009
P15_04	B*18:01:01:01,B*18:01:01:06,B*18:01:01:51	0.00009
P15_05	undefined[B*49:01:01:17(1)]	0.00009
P15_06	B*18:01:01:01,B*18:01:01:06,B*18:01:01:51	0.00009
P15_07	undefined[B*07:02:01:37(100)]	0.00009
P15_08	B*18:01:01:01,B*18:01:01:06,B*18:01:01:51	0.00009
P15_09	B*18:01:01:01,B*18:01:01:06,B*18:01:01:51	0.00009
P15_10	B*18:01:01:02,B*18:01:01:05,B*18:01:01:17,B*18:01:01:20,B*18:01:01:52	0.00009
P15_11	B*18:01:01:02,B*18:01:01:05,B*18:01:01:17,B*18:01:01:20,B*18:01:01:52	0.00009
P15_12	B*18:01:01:02,B*18:01:01:05,B*18:01:01:17,B*18:01:01:20,B*18:01:01:52	0.00009
P15_13	B*18:01:01:02,B*18:01:01:05,B*18:01:01:17,B*18:01:01:20,B*18:01:01:52	0.00009
P15_14	B*18:01:01:04	0.00009
P15_15	B*18:01:01:02,B*18:01:01:05,B*18:01:01:17,B*18:01:01:20,B*18:01:01:52	0.00009
P15_16	B*18:01:01:02,B*18:01:01:05,B*18:01:01:17,B*18:01:01:20,B*18:01:01:52	0.00009
P16_01	B*40:02:01:01,B*40:02:01:02,B*40:02:01:08,B*40:02:01:18,B*40:02:01:19,B*40:02:01:20,B*40:02:01:23,B*40:02:01:24	0.01618
P16_01	B*40:06:01:02,B*40:06:01:13	0.01206
P16_01	B*37:01:01:01	0.00954
P16_01	B*40:04:01:01	0.00383
P16_01	B*40:06:01:01,B*40:06:01:12,B*40:06:01:14	0.00318
P16_01	B*27:07:01	0.00112
P16_01	B*40:06:04:01	0.00084
P16_01	B*40:03:01:02,B*40:03:01:03	0.00075
P16_01	B*40:05:01:01	0.00056
P16_01	B*40:08:01:01	0.00037
P16_01	B*40:64:01:01	0.00037
P16_01	undefined[B*40:02:01:01(1)]	0.00028
P16_01	undefined[B*40:06:01:02(1)]	0.00028
P16_01	undefined[B*40:06:01:04(1)]	0.00028
P16_01	undefined[B*40:02:01:11(1)]	0.00028
P16_01	undefined[B*40:02:01:01(1)]	0.00028
P16_01	undefined[B*27:05:02:01(1)]	0.00019
P16_01	undefined[B*40:06:01:01(1)]	0.00019
P16_01	undefined[B*40:02:01:01(1)]	0.00019
P16_01	undefined[B*37:01:01:07(1)]	0.00019
P16_01	B*40:111	0.00019
P16_01	B*37:04:02	0.00009
P16_01	B*40:20:01:01	0.00009
P16_01	undefined[B*37:01:01:01(1)]	0.00009
P16_01	undefined[B*40:06:01:04(1)]	0.00009
P16_01	undefined[B*40:02:01:11(1)]	0.00009
P16_01	undefined[B*40:02:01:01(1)]	0.00009
P16_01	B*40:129	0.00009
P16_01	undefined[B*37:01:01:07(1)]	0.00009
P16_01	undefined[B*40:06:01:02(1)]	0.00009
P16_01	undefined[B*40:02:01:11(1)]	0.00009
P16_01	undefined[B*37:01:01:01(1)]	0.00009
P16_01	undefined[B*37:01:01:01(1)]	0.00009
P16_01	B*40:229	0.00009
P16_01	undefined[B*40:06:01:02(1)]	0.00009
P16_01	undefined[B*37:01:01:02(1)]	0.00009
P16_01	B*40:06:01:04	0.00009
P16_01	undefined[B*40:02:01:01(1)]	0.00009
P16_01	undefined[B*40:04:01:01(1)]	0.00009
P16_01	undefined[B*37:01:01:07(1)]	0.00009
P16_01	undefined[B*40:02:01:11(1)]	0.00009
P16_01	B*40:02:01:21	0.00009
P16_01	undefined[B*40:06:04:01(1)]	0.00009
P16_01	B*40:02:01:07	0.00009
P16_01	undefined[B*40:02:01:11(1)]	0.00009
P16_01	undefined[B*37:01:01:03(1)]	0.00009
P16_01	undefined[B*40:04:01:02(1)]	0.00009
P16_01	undefined[B*40:06:01:04(1)]	0.00009

P16_01	B*40:50:01:01	0.00009
P16_02	B*27:05:02:01,B*27:05:02:05,B*27:05:02:09	0.01225
P16_02	B*27:03	0.00196
P16_02	B*27:02:01:04	0.00075
P16_02	undefined[B*27:05:02:06(1)]	0.00028
P16_02	B*27:09	0.00028
P16_02	undefined[B*27:05:02:06(1)]	0.00019
P16_02	B*27:05:03	0.00019
P16_02	undefined[B*27:05:02:01(1)]	0.00019
P16_02	B*27:02:01:06	0.00009
P16_02	undefined[B*27:192(10)]	0.00009
P16_02	B*27:08	0.00009
P16_02	undefined[B*27:05:02:06(1)]	0.00009
P16_02	B*27:05:02:21	0.00009
P16_02	undefined[B*27:142(10)]	0.00009
P16_02	undefined[B*27:05:02:06(1)]	0.00009
P16_03	B*27:04:01	0.00215
P16_03	B*27:06:01:01	0.00037
P16_03	undefined[B*27:04:01(1)]	0.00009
P16_03	undefined[B*27:04:01(1)]	0.00009
P16_03	undefined[B*27:165(1)]	0.00009
P16_04	B*40:06:01:02,B*40:06:01:13	0.00019
P16_05	B*40:02:01:01,B*40:02:01:02,B*40:02:01:08,B*40:02:01:18,B*40:02:01:19,B*40:02:01:20,B*40:02:01:23,B*40:02:01:24	0.00009
P16_05	undefined[B*40:02:01:11(1)]	0.00009
P16_06	B*37:01:01:01	0.00009
P16_07	B*40:02:01:01,B*40:02:01:02,B*40:02:01:08,B*40:02:01:18,B*40:02:01:19,B*40:02:01:20,B*40:02:01:23,B*40:02:01:24	0.00009
P16_08	B*27:02:01:04	0.00009
P16_09	B*27:05:02:01,B*27:05:02:05,B*27:05:02:09	0.00009
P16_10	B*27:05:02:01,B*27:05:02:05,B*27:05:02:09	0.00009
P16_12	B*27:05:02:01,B*27:05:02:05,B*27:05:02:09	0.00009
P16_13	undefined[B*37:01:01:01(1)]	0.00009
undef_A	undefined[B*08:08N(10)]	0.00009
undef_B	B*15:01:01:01,B*15:01:01:48	0.00037