

This document includes three tables that constitute the [CWD 2.0.0 Catalogue](#).

[Table 1 lists the alleles in the CWD 2.0.0 Catalogue](#) at the [HLA-A](#), [HLA-B](#), [HLA-C](#), [DRB1](#), [DRB3](#), [DRB4](#), [DRB5](#), [DQA1](#), [DQB1](#), [DPA1](#) and [DPB1](#) loci.

[Table 2 lists the G Groups in the CWD 2.0.0 Catalogue](#) at the [HLA-A](#), [HLA-B](#), [HLA-C](#), [DRB1](#), [DRB3](#), [DRB4](#), [DRB5](#), [DQA1](#), [DQB1](#), [DPA1](#) and [DPB1](#) loci.

[Table 3 lists the P Groups in the CWD 2.0.0 Catalogue](#) at the [HLA-A](#), [HLA-B](#), [HLA-C](#), [DRB1](#), [DRB3](#), [DRB4](#), [DRB5](#), [DQA1](#), [DQB1](#), [DPA1](#) and [DPB1](#) loci.

The fields in these three tables are explained in the table below.

<b>Field</b>	<b>Explanation</b>
<b>Locus</b>	The HLA locus for the allele in question.
<b>IMGT/HLA Accession Number</b>	The unique accession identifier assigned to the allele in question by the IMGT/HLA Database.
<b>IMGT/HLA 3.9.0 Allele Name</b>	The allele name associated with the accession number in question in IMGT/HLA Database release version 3.9.0.
<b>CWD 1.0.0</b>	TRUE; this allele was included in the original CWD catalogue. FALSE; this allele was not included in the original WD catalogue.
<b>Identified After IMGT/HLA 2.15.0</b>	TRUE; this allele was identified after the original CWD catalogue was compiled. FALSE; this allele was known prior to the compilation of the original CWD catalogue.
<b>CWD 2.0.0 Category</b>	C, Common. WD, Well-Documented.
<b>Name Extended from IMGT/HLA 3.5.0 to 3.9.0</b>	YES; the name of the allele in question was shorter under IMGT/HLA Database release version 3.5.0 than the allele name recognized under IMGT/HLA Database release version 3.9.0 because of the identification of pertinent nucleotide variants in IMGT/HLA Database releases 3.6.0, 3.7.0, 3.8.0 or 3.9.0. NO; the name of the allele in question was the same length in both IMGT/HLA Database release versions 3.5.0 and 3.9.0.
<b>IMGT/HLA 3.9.0 G Group</b>	The group of alleles that have identical nucleotide sequences across the exons encoding the peptide binding domains.
<b>IMGT/HLA 3.9.0 P Group</b>	The group of alleles that have the same peptide sequences for the antigen binding domains, excluding null alleles.

Table 1. HLA Alleles in the CWD 2.0.0 Catalogue

Locus	IMGT/HLA Accession Number	IMGT/HLA 3.9.0 Allele Name	CWD 1.0.0	Identified After IMGT/HLA 2.15.0	CWD 2.0.0 Category	Name Extended from IMGT/HLA 3.5.0 to 3.9.0
A	HLA00001	A*01:01:01:01	TRUE	FALSE	C	NO
A	HLA00002	A*01:02	TRUE	FALSE	C	NO
A	HLA00003	A*01:03	TRUE	FALSE	C	NO
A	HLA00004	A*01:04N	TRUE	FALSE	WD	NO
A	HLA01031	A*01:06	FALSE	FALSE	WD	NO
A	HLA01496	A*01:09	FALSE	FALSE	WD	NO
A	HLA02108	A*01:12	FALSE	FALSE	WD	NO
A	HLA02373	A*01:17	FALSE	FALSE	WD	NO
A	HLA02897	A*01:25	FALSE	TRUE	WD	NO
A	HLA00005	A*02:01:01:01	TRUE	FALSE	C	NO
A	HLA01032	A*02:01:04	TRUE	FALSE	C	NO
A	HLA00007	A*02:02	TRUE	FALSE	C	NO
A	HLA00008	A*02:03:01	TRUE	FALSE	C	NO
A	HLA00009	A*02:04	TRUE	FALSE	C	NO
A	HLA00010	A*02:05:01	TRUE	FALSE	C	NO
A	HLA00011	A*02:06:01	TRUE	FALSE	C	NO
A	HLA00012	A*02:07:01	TRUE	FALSE	C	YES
A	HLA00013	A*02:08	TRUE	FALSE	C	NO
A	HLA00014	A*02:09	TRUE	FALSE	C	NO
A	HLA00015	A*02:10	TRUE	FALSE	C	NO
A	HLA00016	A*02:11:01	TRUE	FALSE	C	NO
A	HLA00017	A*02:12	TRUE	FALSE	WD	NO
A	HLA00018	A*02:13	TRUE	FALSE	WD	NO
A	HLA00019	A*02:14	TRUE	FALSE	C	NO
A	HLA00021	A*02:16	TRUE	FALSE	WD	NO
A	HLA00022	A*02:17:01	TRUE	FALSE	C	NO
A	HLA00024	A*02:18	FALSE	FALSE	WD	NO
A	HLA00025	A*02:19	TRUE	FALSE	WD	NO
A	HLA00026	A*02:20:01	TRUE	FALSE	C	NO
A	HLA00027	A*02:21	FALSE	FALSE	WD	NO
A	HLA00028	A*02:22:01	TRUE	FALSE	C	NO
A	HLA00030	A*02:24:01	TRUE	FALSE	C	NO
A	HLA00031	A*02:25	TRUE	FALSE	WD	NO

A	HLA00033	A*02:27	TRUE	FALSE	WD	NO
A	HLA00035	A*02:29	FALSE	FALSE	WD	NO
A	HLA00036	A*02:30	TRUE	FALSE	C	NO
A	HLA01033	A*02:33	TRUE	FALSE	WD	NO
A	HLA01034	A*02:34	FALSE	FALSE	WD	NO
A	HLA01035	A*02:35:01	TRUE	FALSE	WD	NO
A	HLA01036	A*02:36	FALSE	FALSE	WD	NO
A	HLA01105	A*02:38	TRUE	FALSE	WD	NO
A	HLA01109	A*02:39	FALSE	FALSE	WD	NO
A	HLA01222	A*02:44	FALSE	FALSE	WD	NO
A	HLA01249	A*02:45	TRUE	FALSE	WD	NO
A	HLA01404	A*02:49	FALSE	FALSE	WD	NO
A	HLA01534	A*02:53N	TRUE	FALSE	C	NO
A	HLA01610	A*02:58	FALSE	FALSE	WD	NO
A	HLA01665	A*02:60:01	TRUE	FALSE	C	NO
A	HLA01735	A*02:63	FALSE	FALSE	WD	NO
A	HLA01760	A*02:64	TRUE	FALSE	WD	NO
A	HLA02028	A*02:74:01	FALSE	FALSE	WD	NO
A	HLA02233	A*02:84	FALSE	FALSE	WD	NO
A	HLA02235	A*02:85	FALSE	FALSE	WD	NO
A	HLA02248	A*02:86	FALSE	FALSE	WD	NO
A	HLA02321	A*02:87	FALSE	FALSE	WD	NO
A	HLA02468	A*02:93	FALSE	FALSE	WD	NO
A	HLA02501	A*02:96	FALSE	FALSE	WD	NO
A	HLA02936	A*02:119	FALSE	TRUE	WD	NO
A	HLA02956	A*02:122	FALSE	TRUE	WD	NO
A	HLA02957	A*02:123	FALSE	TRUE	WD	NO
A	HLA03096	A*02:131	FALSE	TRUE	WD	NO
A	HLA03181	A*02:137	FALSE	TRUE	WD	NO
A	HLA00037	A*03:01:01:01	TRUE	FALSE	C	NO
A	HLA01960	A*03:01:01:03	TRUE	FALSE	WD	NO
A	HLA00038	A*03:01:02	TRUE	FALSE	WD	NO
A	HLA00039	A*03:01:03	TRUE	FALSE	WD	NO
A	HLA00040	A*03:02:01	TRUE	FALSE	C	NO
A	HLA01107	A*03:05:01	TRUE	FALSE	C	YES
A	HLA01251	A*03:06	FALSE	FALSE	WD	NO
A	HLA01275	A*03:07	FALSE	FALSE	WD	NO
A	HLA01302	A*03:08	FALSE	FALSE	WD	NO

A	HLA01477	A*03:09	FALSE	FALSE	WD	NO
A	HLA02197	A*03:17:01	FALSE	FALSE	WD	YES
A	HLA02369	A*03:21N	FALSE	FALSE	WD	NO
A	HLA02405	A*03:22:01	FALSE	FALSE	WD	NO
A	HLA02761	A*03:26	FALSE	TRUE	WD	NO
A	HLA03709	A*03:50	FALSE	TRUE	WD	NO
A	HLA05705	A*03:108	FALSE	TRUE	WD	NO
A	HLA00043	A*11:01:01	TRUE	FALSE	C	NO
A	HLA00044	A*11:02:01	TRUE	FALSE	C	NO
A	HLA00045	A*11:03	TRUE	FALSE	WD	NO
A	HLA00046	A*11:04	TRUE	FALSE	C	NO
A	HLA00047	A*11:05	TRUE	FALSE	WD	NO
A	HLA01298	A*11:08	FALSE	FALSE	WD	NO
A	HLA01310	A*11:09	FALSE	FALSE	WD	NO
A	HLA01423	A*11:10	FALSE	FALSE	WD	NO
A	HLA01556	A*11:12	FALSE	FALSE	WD	NO
A	HLA01987	A*11:19	FALSE	FALSE	WD	NO
A	HLA02601	A*11:29	FALSE	TRUE	WD	NO
A	HLA02775	A*11:30	FALSE	TRUE	WD	NO
A	HLA00048	A*23:01:01	TRUE	FALSE	C	NO
A	HLA01039	A*23:03:01	FALSE	FALSE	WD	NO
A	HLA01108	A*23:04	FALSE	FALSE	WD	NO
A	HLA01111	A*23:05	FALSE	FALSE	WD	NO
A	HLA01210	A*23:06	FALSE	FALSE	WD	NO
A	HLA02328	A*23:13	FALSE	FALSE	WD	NO
A	HLA02892	A*23:15	FALSE	TRUE	WD	NO
A	HLA03165	A*23:17	FALSE	TRUE	WD	NO
A	HLA03183	A*23:19Q	FALSE	TRUE	WD	NO
A	HLA00050	A*24:02:01:01	TRUE	FALSE	C	NO
A	HLA00051	A*24:02:01:02L	TRUE	FALSE	C	NO
A	HLA00052	A*24:02:02	FALSE	FALSE	WD	NO
A	HLA00053	A*24:03:01	TRUE	FALSE	C	NO
A	HLA00054	A*24:04	FALSE	FALSE	WD	NO
A	HLA00055	A*24:05	TRUE	FALSE	WD	NO
A	HLA00056	A*24:06	TRUE	FALSE	WD	NO
A	HLA00057	A*24:07	TRUE	FALSE	C	NO
A	HLA00058	A*24:08	TRUE	FALSE	WD	NO
A	HLA00059	A*24:09N	TRUE	FALSE	WD	NO

A	HLA00060	A*24:10	TRUE	FALSE	C	NO
A	HLA00061	A*24:11N	TRUE	FALSE	WD	NO
A	HLA00063	A*24:13:01	TRUE	FALSE	WD	NO
A	HLA00064	A*24:14	TRUE	FALSE	WD	NO
A	HLA00065	A*24:15	FALSE	FALSE	WD	NO
A	HLA00067	A*24:17	TRUE	FALSE	C	NO
A	HLA00070	A*24:20	TRUE	FALSE	C	NO
A	HLA00970	A*24:22	TRUE	FALSE	WD	NO
A	HLA01041	A*24:23	TRUE	FALSE	WD	NO
A	HLA01189	A*24:25	TRUE	FALSE	C	NO
A	HLA01171	A*24:26	FALSE	FALSE	WD	NO
A	HLA01316	A*24:29	FALSE	FALSE	WD	NO
A	HLA01317	A*24:30	FALSE	FALSE	WD	NO
A	HLA01330	A*24:31	FALSE	FALSE	WD	NO
A	HLA01465	A*24:32	FALSE	FALSE	WD	NO
A	HLA01491	A*24:33	TRUE	FALSE	C	NO
A	HLA01566	A*24:35	TRUE	FALSE	WD	NO
A	HLA01649	A*24:37	FALSE	FALSE	WD	NO
A	HLA01674	A*24:38	FALSE	FALSE	WD	NO
A	HLA01957	A*24:43	FALSE	FALSE	WD	NO
A	HLA02037	A*24:47	FALSE	FALSE	WD	NO
A	HLA02198	A*24:53	FALSE	FALSE	WD	NO
A	HLA02366	A*24:56	FALSE	FALSE	WD	NO
A	HLA02365	A*24:57	FALSE	FALSE	WD	NO
A	HLA02401	A*24:58	FALSE	FALSE	WD	NO
A	HLA02574	A*24:64	FALSE	FALSE	WD	NO
A	HLA02860	A*24:72	FALSE	TRUE	WD	NO
A	HLA03031	A*24:81	FALSE	TRUE	WD	NO
A	HLA03352	A*24:90N	FALSE	TRUE	WD	NO
A	HLA03535	A*24:95	FALSE	TRUE	WD	NO
A	HLA00071	A*25:01:01	TRUE	FALSE	C	NO
A	HLA00072	A*25:02	TRUE	FALSE	WD	NO
A	HLA00073	A*26:01:01	TRUE	FALSE	C	NO
A	HLA00074	A*26:02	TRUE	FALSE	WD	NO
A	HLA00075	A*26:03:01	TRUE	FALSE	C	NO
A	HLA00079	A*26:07:01	FALSE	FALSE	WD	NO
A	HLA01805	A*26:07:02	TRUE	FALSE	WD	NO
A	HLA00080	A*26:08	TRUE	FALSE	C	NO

A	HLA00081	A*26:09	TRUE	FALSE	WD	NO
A	HLA00084	A*26:12	TRUE	FALSE	WD	NO
A	HLA01044	A*26:13	FALSE	FALSE	WD	NO
A	HLA01120	A*26:14	FALSE	FALSE	WD	NO
A	HLA01272	A*26:15	TRUE	FALSE	WD	NO
A	HLA01347	A*26:16	FALSE	FALSE	WD	NO
A	HLA01351	A*26:17	FALSE	FALSE	WD	NO
A	HLA01525	A*26:18	FALSE	FALSE	WD	NO
A	HLA01876	A*26:20	FALSE	FALSE	WD	NO
A	HLA02581	A*26:31	FALSE	FALSE	WD	NO
A	HLA00085	A*29:01:01:01	TRUE	FALSE	C	NO
A	HLA00086	A*29:02:01:01	TRUE	FALSE	C	NO
A	HLA00088	A*29:04	FALSE	FALSE	WD	NO
A	HLA01716	A*29:09	FALSE	FALSE	WD	NO
A	HLA01795	A*29:10	TRUE	FALSE	WD	NO
A	HLA02083	A*29:12	FALSE	FALSE	WD	NO
A	HLA00089	A*30:01:01	TRUE	FALSE	C	NO
A	HLA00090	A*30:02:01	TRUE	FALSE	C	NO
A	HLA00091	A*30:03	TRUE	FALSE	WD	NO
A	HLA00092	A*30:04:01	TRUE	FALSE	C	NO
A	HLA00095	A*30:07	TRUE	FALSE	WD	NO
A	HLA01112	A*30:08	FALSE	FALSE	WD	NO
A	HLA01224	A*30:09	TRUE	FALSE	WD	NO
A	HLA01411	A*30:10	TRUE	FALSE	WD	NO
A	HLA01445	A*30:11:01	FALSE	FALSE	WD	NO
A	HLA02127	A*30:15	FALSE	FALSE	WD	NO
A	HLA02439	A*30:16	FALSE	FALSE	WD	NO
A	HLA00097	A*31:01:02	TRUE	FALSE	C	NO
A	HLA00098	A*31:02	TRUE	FALSE	WD	NO
A	HLA00099	A*31:03	FALSE	FALSE	WD	NO
A	HLA00100	A*31:04	TRUE	FALSE	WD	NO
A	HLA01546	A*31:06	TRUE	FALSE	WD	NO
A	HLA00066	A*31:08	FALSE	FALSE	WD	NO
A	HLA01651	A*31:09	FALSE	FALSE	WD	NO
A	HLA02040	A*31:11	TRUE	FALSE	WD	NO
A	HLA02085	A*31:12	FALSE	FALSE	WD	NO
A	HLA02355	A*31:13	FALSE	FALSE	WD	NO
A	HLA02737	A*31:15	FALSE	TRUE	WD	NO

A	HLA02898	A*31:16	FALSE	TRUE	WD	NO
A	HLA02934	A*31:18	FALSE	TRUE	WD	NO
A	HLA03116	A*31:20	FALSE	TRUE	WD	NO
A	HLA03920	A*31:26	FALSE	TRUE	WD	NO
A	HLA00101	A*32:01:01	TRUE	FALSE	C	NO
A	HLA00102	A*32:02	TRUE	FALSE	WD	NO
A	HLA00103	A*32:03	FALSE	FALSE	WD	NO
A	HLA01045	A*32:04	TRUE	FALSE	WD	NO
A	HLA01228	A*32:06	TRUE	FALSE	WD	NO
A	HLA01463	A*32:07	FALSE	FALSE	WD	NO
A	HLA01886	A*32:08	FALSE	FALSE	WD	NO
A	HLA00104	A*33:01:01	TRUE	FALSE	C	NO
A	HLA00106	A*33:03:01	TRUE	FALSE	C	NO
A	HLA00971	A*33:05	TRUE	FALSE	WD	NO
A	HLA02739	A*33:09	FALSE	TRUE	WD	NO
A	HLA00108	A*34:01:01	TRUE	FALSE	C	NO
A	HLA00109	A*34:02:01	TRUE	FALSE	C	NO
A	HLA01675	A*34:05	TRUE	FALSE	C	NO
A	HLA00110	A*36:01	TRUE	FALSE	C	NO
A	HLA01290	A*36:02	FALSE	FALSE	WD	NO
A	HLA01497	A*36:03	TRUE	FALSE	WD	NO
A	HLA01631	A*36:04	FALSE	FALSE	WD	NO
A	HLA00111	A*43:01	TRUE	FALSE	C	NO
A	HLA00112	A*66:01	TRUE	FALSE	C	NO
A	HLA00113	A*66:02	TRUE	FALSE	C	NO
A	HLA00114	A*66:03	TRUE	FALSE	WD	NO
A	HLA01375	A*66:04	FALSE	FALSE	WD	NO
A	HLA00115	A*68:01:01:01	TRUE	FALSE	C	NO
A	HLA00116	A*68:01:02	TRUE	FALSE	C	NO
A	HLA00117	A*68:02:01:01	TRUE	FALSE	C	NO
A	HLA02508	A*68:02:01:02	FALSE	FALSE	WD	NO
A	HLA00118	A*68:03:01	TRUE	FALSE	C	NO
A	HLA00121	A*68:05	TRUE	FALSE	C	NO
A	HLA00122	A*68:06	TRUE	FALSE	WD	NO
A	HLA00123	A*68:07	TRUE	FALSE	WD	NO
A	HLA00124	A*68:08:01	FALSE	FALSE	WD	NO
A	HLA00972	A*68:10	FALSE	FALSE	WD	NO
A	HLA00973	A*68:11N	TRUE	FALSE	WD	NO

A	HLA01046	A*68:12	TRUE	FALSE	WD	NO
A	HLA01106	A*68:15	TRUE	FALSE	WD	NO
A	HLA01170	A*68:17	TRUE	FALSE	WD	NO
A	HLA01464	A*68:20	TRUE	FALSE	WD	NO
A	HLA01595	A*68:22	FALSE	FALSE	WD	NO
A	HLA01707	A*68:24	FALSE	FALSE	WD	NO
A	HLA01822	A*68:25	FALSE	FALSE	WD	NO
A	HLA01944	A*68:27	FALSE	FALSE	WD	NO
A	HLA02364	A*68:30	FALSE	FALSE	WD	NO
A	HLA02441	A*68:31	FALSE	FALSE	WD	NO
A	HLA02624	A*68:35	FALSE	FALSE	WD	NO
A	HLA02780	A*68:37	FALSE	TRUE	WD	NO
A	HLA02982	A*68:40	FALSE	TRUE	WD	NO
A	HLA00126	A*69:01	TRUE	FALSE	C	NO
A	HLA00127	A*74:01	TRUE	FALSE	C	NO
A	HLA00129	A*74:03	TRUE	FALSE	C	NO
A	HLA01254	A*74:05	FALSE	FALSE	WD	NO
A	HLA01422	A*74:06	FALSE	FALSE	WD	NO
A	HLA01653	A*74:09	FALSE	FALSE	WD	NO
A	HLA01819	A*74:10	FALSE	FALSE	WD	NO
A	HLA02254	A*74:11	FALSE	FALSE	WD	NO
A	HLA03499	A*74:13	FALSE	TRUE	WD	NO
A	HLA00130	A*80:01	TRUE	FALSE	C	NO
B	HLA00132	B*07:02:01	TRUE	FALSE	C	NO
B	HLA00135	B*07:03	TRUE	FALSE	WD	NO
B	HLA00136	B*07:04	TRUE	FALSE	C	NO
B	HLA00137	B*07:05:01	TRUE	FALSE	C	NO
B	HLA00138	B*07:06	TRUE	FALSE	C	NO
B	HLA00139	B*07:07	TRUE	FALSE	WD	NO
B	HLA00140	B*07:08	FALSE	FALSE	WD	NO
B	HLA00141	B*07:09	TRUE	FALSE	WD	NO
B	HLA00142	B*07:10	TRUE	FALSE	C	NO
B	HLA00144	B*07:12	TRUE	FALSE	WD	NO
B	HLA00145	B*07:13	FALSE	FALSE	WD	NO
B	HLA01049	B*07:14	TRUE	FALSE	WD	NO
B	HLA01050	B*07:15	FALSE	FALSE	WD	NO
B	HLA01051	B*07:16	FALSE	FALSE	WD	NO
B	HLA01184	B*07:20	TRUE	FALSE	WD	NO



B	HLA01286	B*07:23	FALSE	FALSE	WD	NO
B	HLA01362	B*07:26	FALSE	FALSE	WD	NO
B	HLA01808	B*07:36	FALSE	FALSE	WD	NO
B	HLA01881	B*07:37	FALSE	FALSE	WD	NO
B	HLA02175	B*07:42	FALSE	FALSE	WD	NO
B	HLA02247	B*07:43	FALSE	FALSE	WD	NO
B	HLA02446	B*07:46	FALSE	FALSE	WD	NO
B	HLA02713	B*07:51	FALSE	TRUE	WD	NO
B	HLA00146	B*08:01:01	TRUE	FALSE	C	NO
B	HLA00147	B*08:02	TRUE	FALSE	WD	NO
B	HLA00148	B*08:03	FALSE	FALSE	WD	NO
B	HLA00149	B*08:04	TRUE	FALSE	WD	NO
B	HLA00974	B*08:07	FALSE	FALSE	WD	NO
B	HLA00976	B*08:09	TRUE	FALSE	WD	NO
B	HLA01352	B*08:13	FALSE	FALSE	WD	NO
B	HLA01701	B*08:18	FALSE	FALSE	WD	NO
B	HLA01752	B*08:20	FALSE	FALSE	WD	NO
B	HLA02132	B*08:23	FALSE	FALSE	WD	NO
B	HLA03164	B*08:35	FALSE	TRUE	WD	NO
B	HLA00152	B*13:01:01	TRUE	FALSE	C	NO
B	HLA00153	B*13:02:01	TRUE	FALSE	C	NO
B	HLA00154	B*13:03	TRUE	FALSE	WD	NO
B	HLA00155	B*13:04	TRUE	FALSE	WD	NO
B	HLA01476	B*13:08Q	FALSE	FALSE	WD	NO
B	HLA01591	B*13:10	TRUE	FALSE	WD	NO
B	HLA01840	B*13:12	FALSE	FALSE	WD	NO
B	HLA00157	B*14:01:01	TRUE	FALSE	C	NO
B	HLA00158	B*14:02:01	TRUE	FALSE	C	NO
B	HLA00159	B*14:03	TRUE	FALSE	C	NO
B	HLA00161	B*14:05	TRUE	FALSE	WD	NO
B	HLA03318	B*14:09	FALSE	TRUE	WD	NO
B	HLA00162	B*15:01:01:01	TRUE	FALSE	C	NO
B	HLA00163	B*15:01:01:02N	TRUE	FALSE	WD	NO
B	HLA00165	B*15:02:01	TRUE	FALSE	C	NO
B	HLA00166	B*15:03:01	TRUE	FALSE	C	NO
B	HLA00167	B*15:04	TRUE	FALSE	WD	NO
B	HLA00168	B*15:05:01	TRUE	FALSE	WD	NO
B	HLA00169	B*15:06	TRUE	FALSE	WD	NO

B	HLA00170	B*15:07:01	TRUE	FALSE	C	NO
B	HLA00171	B*15:08	TRUE	FALSE	C	NO
B	HLA00172	B*15:09	TRUE	FALSE	C	NO
B	HLA00173	B*15:10:01	TRUE	FALSE	C	NO
B	HLA00174	B*15:11:01	TRUE	FALSE	C	NO
B	HLA00175	B*15:12	TRUE	FALSE	C	NO
B	HLA00176	B*15:13:01	TRUE	FALSE	C	NO
B	HLA00177	B*15:14	TRUE	FALSE	WD	NO
B	HLA00178	B*15:15	TRUE	FALSE	C	NO
B	HLA00179	B*15:16:01	TRUE	FALSE	C	NO
B	HLA00180	B*15:17:01:01	TRUE	FALSE	C	NO
B	HLA00181	B*15:18:01	TRUE	FALSE	C	NO
B	HLA00183	B*15:20	TRUE	FALSE	WD	NO
B	HLA00184	B*15:21	TRUE	FALSE	C	NO
B	HLA00186	B*15:23	TRUE	FALSE	WD	NO
B	HLA00187	B*15:24	TRUE	FALSE	C	NO
B	HLA00188	B*15:25:01	TRUE	FALSE	C	NO
B	HLA00190	B*15:27:01	TRUE	FALSE	WD	NO
B	HLA00191	B*15:28	TRUE	FALSE	WD	NO
B	HLA00192	B*15:29	TRUE	FALSE	WD	NO
B	HLA00193	B*15:30	TRUE	FALSE	C	NO
B	HLA00194	B*15:31	TRUE	FALSE	WD	NO
B	HLA00195	B*15:32	TRUE	FALSE	C	NO
B	HLA00196	B*15:33	TRUE	FALSE	WD	NO
B	HLA00197	B*15:34	TRUE	FALSE	C	NO
B	HLA00198	B*15:35	TRUE	FALSE	C	NO
B	HLA00200	B*15:37	TRUE	FALSE	WD	NO
B	HLA00201	B*15:38:01	TRUE	FALSE	WD	NO
B	HLA00202	B*15:39:01	TRUE	FALSE	C	NO
B	HLA00203	B*15:40	TRUE	FALSE	WD	NO
B	HLA00205	B*15:42	FALSE	FALSE	WD	NO
B	HLA00207	B*15:44	FALSE	FALSE	WD	NO
B	HLA00208	B*15:45	FALSE	FALSE	WD	NO
B	HLA00209	B*15:46	TRUE	FALSE	WD	NO
B	HLA00210	B*15:47:01	TRUE	FALSE	WD	YES
B	HLA00211	B*15:48	TRUE	FALSE	WD	NO
B	HLA01053	B*15:52	TRUE	FALSE	WD	NO
B	HLA01054	B*15:53	FALSE	FALSE	WD	NO

B	HLA01103	B*15:54	TRUE	FALSE	WD	NO
B	HLA01113	B*15:55	FALSE	FALSE	WD	NO
B	HLA01114	B*15:56	FALSE	FALSE	WD	NO
B	HLA01118	B*15:58	TRUE	FALSE	WD	NO
B	HLA01284	B*15:63	FALSE	FALSE	WD	NO
B	HLA01426	B*15:65	FALSE	FALSE	WD	NO
B	HLA01561	B*15:71	FALSE	FALSE	WD	NO
B	HLA01611	B*15:73	FALSE	FALSE	WD	NO
B	HLA01690	B*15:75	FALSE	FALSE	WD	NO
B	HLA01801	B*15:82	FALSE	FALSE	WD	NO
B	HLA02483	B*15:113	FALSE	FALSE	WD	NO
B	HLA02781	B*15:125	FALSE	TRUE	WD	NO
B	HLA02976	B*15:132	FALSE	TRUE	WD	NO
B	HLA03217	B*15:141	FALSE	TRUE	WD	NO
B	HLA00213	B*18:01:01:01	TRUE	FALSE	C	YES
B	HLA01565	B*18:01:02	TRUE	FALSE	WD	NO
B	HLA00214	B*18:02	TRUE	FALSE	C	NO
B	HLA00215	B*18:03	TRUE	FALSE	C	NO
B	HLA00216	B*18:04	TRUE	FALSE	WD	NO
B	HLA00217	B*18:05	FALSE	FALSE	WD	NO
B	HLA00218	B*18:06	FALSE	FALSE	WD	NO
B	HLA01055	B*18:08	FALSE	FALSE	WD	NO
B	HLA01270	B*18:11	FALSE	FALSE	WD	NO
B	HLA01281	B*18:12	FALSE	FALSE	WD	NO
B	HLA01353	B*18:13	FALSE	FALSE	WD	NO
B	HLA01506	B*18:14	FALSE	FALSE	WD	NO
B	HLA01613	B*18:18	FALSE	FALSE	WD	NO
B	HLA01914	B*18:20	FALSE	FALSE	WD	NO
B	HLA02783	B*18:25	FALSE	TRUE	WD	NO
B	HLA03612	B*18:33	FALSE	TRUE	WD	NO
B	HLA00220	B*27:01	TRUE	FALSE	WD	NO
B	HLA00221	B*27:02:01	TRUE	FALSE	C	NO
B	HLA00222	B*27:03	TRUE	FALSE	C	NO
B	HLA00223	B*27:04:01	TRUE	FALSE	C	NO
B	HLA00225	B*27:05:02	TRUE	FALSE	C	NO
B	HLA00226	B*27:05:03	TRUE	FALSE	WD	NO
B	HLA00227	B*27:06	TRUE	FALSE	C	NO
B	HLA00228	B*27:07:01	TRUE	FALSE	C	YES

B	HLA00229	B*27:08	TRUE	FALSE	C	NO
B	HLA00230	B*27:09	TRUE	FALSE	WD	NO
B	HLA00231	B*27:10	FALSE	FALSE	WD	NO
B	HLA00233	B*27:12	TRUE	FALSE	WD	NO
B	HLA00235	B*27:14	TRUE	FALSE	WD	NO
B	HLA00236	B*27:15	FALSE	FALSE	WD	NO
B	HLA01130	B*27:17	FALSE	FALSE	WD	NO
B	HLA01147	B*27:19	FALSE	FALSE	WD	NO
B	HLA01173	B*27:20	FALSE	FALSE	WD	NO
B	HLA01504	B*27:24	FALSE	FALSE	WD	NO
B	HLA02023	B*27:27	FALSE	FALSE	WD	NO
B	HLA00237	B*35:01:01:01	TRUE	FALSE	C	NO
B	HLA00238	B*35:02:01	TRUE	FALSE	C	NO
B	HLA00239	B*35:03:01	TRUE	FALSE	C	NO
B	HLA00240	B*35:04:01	TRUE	FALSE	C	NO
B	HLA00241	B*35:05:01	TRUE	FALSE	C	NO
B	HLA00242	B*35:06	TRUE	FALSE	WD	NO
B	HLA00244	B*35:08:01	TRUE	FALSE	C	NO
B	HLA00245	B*35:09:01	TRUE	FALSE	WD	NO
B	HLA00246	B*35:09:02	TRUE	FALSE	WD	NO
B	HLA00247	B*35:10	TRUE	FALSE	WD	NO
B	HLA00248	B*35:11:01	TRUE	FALSE	WD	NO
B	HLA00249	B*35:12:01	TRUE	FALSE	C	NO
B	HLA00250	B*35:13	TRUE	FALSE	WD	NO
B	HLA00251	B*35:14:01	TRUE	FALSE	C	NO
B	HLA00252	B*35:15	FALSE	FALSE	WD	NO
B	HLA00253	B*35:16	TRUE	FALSE	C	NO
B	HLA00254	B*35:17	TRUE	FALSE	C	NO
B	HLA00255	B*35:18	TRUE	FALSE	WD	NO
B	HLA00256	B*35:19	TRUE	FALSE	C	NO
B	HLA00257	B*35:20:01	TRUE	FALSE	C	NO
B	HLA00258	B*35:21	TRUE	FALSE	C	NO
B	HLA00259	B*35:22	TRUE	FALSE	WD	NO
B	HLA00260	B*35:23	TRUE	FALSE	C	NO
B	HLA00261	B*35:24:01	TRUE	FALSE	WD	NO
B	HLA00262	B*35:25	FALSE	FALSE	WD	NO
B	HLA00263	B*35:26	FALSE	FALSE	WD	NO
B	HLA00264	B*35:27	TRUE	FALSE	WD	NO

B	HLA00981	B*35:28	TRUE	FALSE	WD	NO
B	HLA00982	B*35:29:01	FALSE	FALSE	WD	YES
B	HLA01057	B*35:30	TRUE	FALSE	WD	NO
B	HLA01058	B*35:31	TRUE	FALSE	WD	NO
B	HLA01059	B*35:32:01	FALSE	FALSE	WD	YES
B	HLA01194	B*35:34	FALSE	FALSE	WD	NO
B	HLA01314	B*35:37	FALSE	FALSE	WD	NO
B	HLA01563	B*35:41	TRUE	FALSE	C	NO
B	HLA00185	B*35:43:01	TRUE	FALSE	C	NO
B	HLA01846	B*35:47	FALSE	FALSE	WD	NO
B	HLA01850	B*35:48	FALSE	FALSE	WD	NO
B	HLA01888	B*35:49	FALSE	FALSE	WD	NO
B	HLA02031	B*35:55	FALSE	FALSE	WD	NO
B	HLA02977	B*35:77	FALSE	TRUE	WD	NO
B	HLA00265	B*37:01:01	TRUE	FALSE	C	NO
B	HLA00266	B*37:02	TRUE	FALSE	WD	NO
B	HLA01267	B*37:03N	FALSE	FALSE	WD	NO
B	HLA02007	B*37:07	FALSE	FALSE	WD	NO
B	HLA00267	B*38:01:01	TRUE	FALSE	C	NO
B	HLA00268	B*38:02:01	TRUE	FALSE	C	NO
B	HLA00269	B*38:02:02	TRUE	FALSE	WD	NO
B	HLA01265	B*38:06	FALSE	FALSE	WD	NO
B	HLA01655	B*38:09	FALSE	FALSE	WD	NO
B	HLA00271	B*39:01:01:01	TRUE	FALSE	C	NO
B	HLA00274	B*39:02:01	TRUE	FALSE	WD	NO
B	HLA00275	B*39:02:02	TRUE	FALSE	C	NO
B	HLA00276	B*39:03	TRUE	FALSE	C	NO
B	HLA00277	B*39:04	TRUE	FALSE	WD	NO
B	HLA00278	B*39:05:01	TRUE	FALSE	C	NO
B	HLA00279	B*39:06:01	TRUE	FALSE	WD	NO
B	HLA00280	B*39:06:02	TRUE	FALSE	C	NO
B	HLA00281	B*39:07	FALSE	FALSE	WD	NO
B	HLA00282	B*39:08	TRUE	FALSE	C	NO
B	HLA00283	B*39:09	TRUE	FALSE	WD	NO
B	HLA00284	B*39:10:01	TRUE	FALSE	C	NO
B	HLA00285	B*39:11	TRUE	FALSE	C	NO
B	HLA00286	B*39:12	TRUE	FALSE	C	NO
B	HLA00287	B*39:13:01	TRUE	FALSE	WD	NO

B	HLA00288	B*39:14	TRUE	FALSE	WD	NO
B	HLA00289	B*39:15	TRUE	FALSE	C	NO
B	HLA01183	B*39:20	TRUE	FALSE	WD	NO
B	HLA01196	B*39:22	FALSE	FALSE	WD	NO
B	HLA01221	B*39:24:01	TRUE	FALSE	C	NO
B	HLA01528	B*39:26	FALSE	FALSE	WD	NO
B	HLA01926	B*39:31	FALSE	FALSE	WD	NO
B	HLA02384	B*39:37	FALSE	FALSE	WD	NO
B	HLA02426	B*39:39:01	FALSE	FALSE	WD	YES
B	HLA00292	B*40:01:02	TRUE	FALSE	C	NO
B	HLA00293	B*40:02:01	TRUE	FALSE	C	NO
B	HLA00294	B*40:03	TRUE	FALSE	WD	NO
B	HLA00295	B*40:04	TRUE	FALSE	WD	NO
B	HLA00296	B*40:05	TRUE	FALSE	C	NO
B	HLA00297	B*40:06:01:01	TRUE	FALSE	C	NO
B	HLA00298	B*40:07	TRUE	FALSE	WD	NO
B	HLA00299	B*40:08	TRUE	FALSE	C	NO
B	HLA00300	B*40:09	TRUE	FALSE	WD	NO
B	HLA00301	B*40:10:01	TRUE	FALSE	WD	NO
B	HLA00302	B*40:11:01	TRUE	FALSE	WD	NO
B	HLA00303	B*40:12	TRUE	FALSE	WD	NO
B	HLA00304	B*40:13	FALSE	FALSE	WD	NO
B	HLA00307	B*40:16	TRUE	FALSE	C	NO
B	HLA00310	B*40:19	FALSE	FALSE	WD	NO
B	HLA00311	B*40:20	TRUE	FALSE	WD	NO
B	HLA00984	B*40:22N	TRUE	FALSE	WD	NO
B	HLA01062	B*40:23	TRUE	FALSE	WD	NO
B	HLA01064	B*40:25	FALSE	FALSE	WD	NO
B	HLA01122	B*40:26	FALSE	FALSE	WD	NO
B	HLA01129	B*40:27:01	TRUE	FALSE	C	NO
B	HLA01232	B*40:30	TRUE	FALSE	WD	NO
B	HLA01269	B*40:32	FALSE	FALSE	WD	NO
B	HLA01510	B*40:40	TRUE	FALSE	WD	NO
B	HLA01600	B*40:43	FALSE	FALSE	WD	NO
B	HLA01899	B*40:50	FALSE	FALSE	WD	NO
B	HLA02482	B*40:64	FALSE	FALSE	WD	NO
B	HLA03312	B*40:90	FALSE	TRUE	WD	NO
B	HLA03584	B*40:94	FALSE	TRUE	WD	NO

B	HLA04940	B*40:114	FALSE	TRUE	WD	NO
B	HLA04878	B*40:129	FALSE	TRUE	WD	NO
B	HLA00312	B*41:01	TRUE	FALSE	C	NO
B	HLA00313	B*41:02:01	TRUE	FALSE	C	NO
B	HLA00314	B*41:03:01	TRUE	FALSE	C	NO
B	HLA02144	B*41:07	FALSE	FALSE	WD	NO
B	HLA00315	B*42:01:01	TRUE	FALSE	C	NO
B	HLA00316	B*42:02	TRUE	FALSE	C	NO
B	HLA01712	B*42:05:01	FALSE	FALSE	WD	NO
B	HLA00318	B*44:02:01:01	TRUE	FALSE	C	NO
B	HLA00319	B*44:03:01	TRUE	FALSE	C	NO
B	HLA00320	B*44:03:02	TRUE	FALSE	C	NO
B	HLA00321	B*44:04	TRUE	FALSE	C	NO
B	HLA00322	B*44:05:01	TRUE	FALSE	C	NO
B	HLA00323	B*44:06	TRUE	FALSE	WD	NO
B	HLA00324	B*44:07	TRUE	FALSE	WD	NO
B	HLA00325	B*44:08	TRUE	FALSE	WD	NO
B	HLA00326	B*44:09	TRUE	FALSE	WD	NO
B	HLA00327	B*44:10	TRUE	FALSE	C	NO
B	HLA01065	B*44:12	FALSE	FALSE	WD	NO
B	HLA01068	B*44:15	TRUE	FALSE	WD	NO
B	HLA01144	B*44:18	FALSE	FALSE	WD	NO
B	HLA01195	B*44:20	TRUE	FALSE	WD	NO
B	HLA01197	B*44:21	FALSE	FALSE	WD	NO
B	HLA01313	B*44:22	FALSE	FALSE	WD	NO
B	HLA01341	B*44:23N	TRUE	FALSE	WD	NO
B	HLA01354	B*44:24	FALSE	FALSE	WD	NO
B	HLA01427	B*44:25	FALSE	FALSE	WD	NO
B	HLA01489	B*44:27:01	TRUE	FALSE	C	NO
B	HLA01526	B*44:29	TRUE	FALSE	WD	NO
B	HLA02695	B*44:50	FALSE	TRUE	WD	NO
B	HLA00329	B*45:01	TRUE	FALSE	C	NO
B	HLA00331	B*46:01:01	TRUE	FALSE	C	NO
B	HLA01139	B*46:02	FALSE	FALSE	WD	NO
B	HLA00332	B*47:01:01:01	TRUE	FALSE	C	NO
B	HLA00333	B*47:02	TRUE	FALSE	WD	NO
B	HLA00334	B*47:03	TRUE	FALSE	WD	NO
B	HLA00335	B*48:01:01	TRUE	FALSE	C	NO

B	HLA00336	B*48:02:01	TRUE	FALSE	WD	NO
B	HLA00337	B*48:03:01	TRUE	FALSE	C	NO
B	HLA00338	B*48:04	TRUE	FALSE	WD	NO
B	HLA00339	B*48:05	TRUE	FALSE	WD	NO
B	HLA00986	B*48:06	FALSE	FALSE	WD	NO
B	HLA01069	B*48:07	TRUE	FALSE	WD	NO
B	HLA02112	B*48:12	FALSE	FALSE	WD	NO
B	HLA02200	B*48:13	FALSE	FALSE	WD	NO
B	HLA00340	B*49:01:01	TRUE	FALSE	C	NO
B	HLA00341	B*50:01:01	TRUE	FALSE	C	NO
B	HLA00342	B*50:02	TRUE	FALSE	C	NO
B	HLA01070	B*50:04	FALSE	FALSE	WD	NO
B	HLA00344	B*51:01:01	TRUE	FALSE	C	NO
B	HLA00345	B*51:01:02	TRUE	FALSE	WD	NO
B	HLA00346	B*51:02:01	TRUE	FALSE	C	NO
B	HLA00347	B*51:02:02	TRUE	FALSE	WD	NO
B	HLA00348	B*51:03	TRUE	FALSE	WD	NO
B	HLA00349	B*51:04	TRUE	FALSE	WD	NO
B	HLA00350	B*51:05	TRUE	FALSE	C	NO
B	HLA00351	B*51:06:01	TRUE	FALSE	C	NO
B	HLA00352	B*51:07:01	TRUE	FALSE	C	NO
B	HLA00353	B*51:08	TRUE	FALSE	C	NO
B	HLA00354	B*51:09:01	TRUE	FALSE	C	NO
B	HLA00355	B*51:10	FALSE	FALSE	WD	NO
B	HLA00356	B*51:11N	TRUE	FALSE	WD	NO
B	HLA00358	B*51:13:01	TRUE	FALSE	WD	NO
B	HLA01127	B*51:13:02	FALSE	FALSE	WD	NO
B	HLA00359	B*51:14	TRUE	FALSE	WD	NO
B	HLA01071	B*51:17	FALSE	FALSE	WD	NO
B	HLA01073	B*51:19	TRUE	FALSE	WD	NO
B	HLA01134	B*51:21	TRUE	FALSE	WD	NO
B	HLA01243	B*51:22	TRUE	FALSE	WD	NO
B	HLA01245	B*51:23	TRUE	FALSE	WD	NO
B	HLA01568	B*51:29	FALSE	FALSE	WD	NO
B	HLA01678	B*51:34	FALSE	FALSE	WD	NO
B	HLA02419	B*51:40	FALSE	FALSE	WD	NO
B	HLA02620	B*51:43	FALSE	FALSE	WD	NO
B	HLA02933	B*51:49	FALSE	TRUE	WD	NO



B	HLA03099	B*51:50	FALSE	TRUE	WD	NO
B	HLA03282	B*51:55	FALSE	TRUE	WD	NO
B	HLA00362	B*52:01:01:01	TRUE	FALSE	C	NO
B	HLA00363	B*52:01:02	TRUE	FALSE	C	NO
B	HLA01141	B*52:02	FALSE	FALSE	WD	NO
B	HLA01295	B*52:03	FALSE	FALSE	WD	NO
B	HLA01580	B*52:04	FALSE	FALSE	WD	NO
B	HLA05223	B*52:21	FALSE	TRUE	WD	NO
B	HLA00364	B*53:01:01	TRUE	FALSE	C	NO
B	HLA00365	B*53:02	TRUE	FALSE	WD	NO
B	HLA00987	B*53:04	FALSE	FALSE	WD	NO
B	HLA01178	B*53:05	FALSE	FALSE	WD	NO
B	HLA01261	B*53:06	FALSE	FALSE	WD	NO
B	HLA00367	B*54:01:01	TRUE	FALSE	C	NO
B	HLA00368	B*55:01:01	TRUE	FALSE	C	NO
B	HLA02324	B*55:01:03	FALSE	FALSE	WD	NO
B	HLA00369	B*55:02:01	TRUE	FALSE	C	NO
B	HLA00371	B*55:04	TRUE	FALSE	WD	NO
B	HLA00374	B*55:07	FALSE	FALSE	WD	NO
B	HLA01553	B*55:12	FALSE	FALSE	WD	NO
B	HLA02671	B*55:23	FALSE	FALSE	WD	NO
B	HLA00376	B*56:01:01	TRUE	FALSE	C	NO
B	HLA00377	B*56:02	TRUE	FALSE	WD	NO
B	HLA00378	B*56:03	TRUE	FALSE	WD	NO
B	HLA00379	B*56:04	TRUE	FALSE	WD	NO
B	HLA01658	B*56:10	FALSE	FALSE	WD	NO
B	HLA02043	B*56:15	FALSE	FALSE	WD	NO
B	HLA02261	B*56:16	FALSE	FALSE	WD	NO
B	HLA00381	B*57:01:01	TRUE	FALSE	C	NO
B	HLA00382	B*57:02:01	TRUE	FALSE	C	NO
B	HLA00383	B*57:03:01	TRUE	FALSE	C	NO
B	HLA00384	B*57:04	TRUE	FALSE	WD	NO
B	HLA00385	B*57:05	TRUE	FALSE	WD	NO
B	HLA00386	B*58:01:01	TRUE	FALSE	C	NO
B	HLA00387	B*58:02	TRUE	FALSE	C	NO
B	HLA01142	B*58:04	FALSE	FALSE	WD	NO
B	HLA01312	B*58:06	FALSE	FALSE	WD	NO
B	HLA00389	B*59:01:01:01	TRUE	FALSE	C	NO

B	HLA00390	B*67:01:01	TRUE	FALSE	C	NO
B	HLA01374	B*67:02	TRUE	FALSE	WD	NO
B	HLA00392	B*73:01	TRUE	FALSE	C	NO
B	HLA00393	B*78:01:01	TRUE	FALSE	C	NO
B	HLA00395	B*78:02:02	TRUE	FALSE	WD	NO
B	HLA00990	B*78:04	FALSE	FALSE	WD	NO
B	HLA00398	B*81:01	TRUE	FALSE	C	NO
B	HLA01809	B*81:02	FALSE	FALSE	WD	NO
B	HLA00399	B*82:01	TRUE	FALSE	C	NO
B	HLA01188	B*82:02	TRUE	FALSE	WD	NO
C	HLA00401	C*01:02:01	TRUE	FALSE	C	NO
C	HLA00402	C*01:03	TRUE	FALSE	WD	NO
C	HLA01555	C*01:06	FALSE	FALSE	WD	NO
C	HLA01644	C*01:07	FALSE	FALSE	WD	NO
C	HLA01636	C*01:08	FALSE	FALSE	WD	NO
C	HLA01866	C*01:10	FALSE	FALSE	WD	NO
C	HLA02813	C*01:17	FALSE	TRUE	WD	NO
C	HLA03707	C*01:27	FALSE	TRUE	WD	NO
C	HLA00404	C*02:02:01	TRUE	FALSE	WD	NO
C	HLA00405	C*02:02:02	TRUE	FALSE	C	NO
C	HLA01344	C*02:04	FALSE	FALSE	WD	NO
C	HLA01673	C*02:06	FALSE	FALSE	WD	NO
C	HLA01715	C*02:07	TRUE	FALSE	WD	NO
C	HLA01739	C*02:08	FALSE	FALSE	WD	NO
C	HLA02120	C*02:10	TRUE	FALSE	C	NO
C	HLA02430	C*02:14	FALSE	FALSE	WD	NO
C	HLA03024	C*02:19	FALSE	TRUE	WD	NO
C	HLA00410	C*03:02:01	TRUE	FALSE	C	NO
C	HLA01543	C*03:02:02:01	TRUE	FALSE	WD	NO
C	HLA00411	C*03:03:01	TRUE	FALSE	C	NO
C	HLA01855	C*03:03:04	TRUE	FALSE	C	NO
C	HLA00413	C*03:04:01:01	TRUE	FALSE	C	NO
C	HLA00414	C*03:04:02	TRUE	FALSE	C	NO
C	HLA00415	C*03:05	TRUE	FALSE	C	NO
C	HLA00416	C*03:06	TRUE	FALSE	C	NO
C	HLA00417	C*03:07	TRUE	FALSE	WD	NO
C	HLA00418	C*03:08	TRUE	FALSE	WD	NO
C	HLA00419	C*03:09	TRUE	FALSE	WD	NO

C	HLA01076	C*03:10	TRUE	FALSE	WD	NO
C	HLA01425	C*03:14	TRUE	FALSE	WD	NO
C	HLA01660	C*03:16	TRUE	FALSE	WD	NO
C	HLA01906	C*03:17	FALSE	FALSE	WD	NO
C	HLA02133	C*03:19	TRUE	FALSE	WD	NO
C	HLA02758	C*03:35	FALSE	TRUE	WD	NO
C	HLA02817	C*03:36	FALSE	TRUE	WD	NO
C	HLA02881	C*03:40:01	FALSE	TRUE	WD	NO
C	HLA05162	C*03:88	FALSE	TRUE	WD	NO
C	HLA00420	C*04:01:01:01	TRUE	FALSE	C	NO
C	HLA00423	C*04:03	TRUE	FALSE	C	NO
C	HLA00424	C*04:04:01	TRUE	FALSE	C	NO
C	HLA00425	C*04:05	FALSE	FALSE	WD	NO
C	HLA00426	C*04:06	TRUE	FALSE	WD	NO
C	HLA01078	C*04:07	TRUE	FALSE	C	NO
C	HLA01311	C*04:08	FALSE	FALSE	WD	NO
C	HLA01451	C*04:09N	TRUE	FALSE	C	NO
C	HLA01645	C*04:10	FALSE	FALSE	WD	NO
C	HLA01851	C*04:13	TRUE	FALSE	WD	NO
C	HLA02511	C*04:19	FALSE	FALSE	WD	NO
C	HLA02831	C*04:27	FALSE	TRUE	WD	NO
C	HLA05916	C*04:82	FALSE	TRUE	WD	NO
C	HLA00427	C*05:01:01:01	TRUE	FALSE	C	NO
C	HLA03586	C*05:01:01:02	FALSE	TRUE	WD	NO
C	HLA01174	C*05:04	FALSE	FALSE	WD	NO
C	HLA01602	C*05:05	TRUE	FALSE	WD	NO
C	HLA01832	C*05:07N	TRUE	FALSE	WD	NO
C	HLA01843	C*05:08	FALSE	FALSE	WD	NO
C	HLA01856	C*05:09:01	TRUE	FALSE	WD	YES
C	HLA01907	C*05:10	TRUE	FALSE	WD	NO
C	HLA02586	C*05:14	FALSE	FALSE	WD	NO
C	HLA00430	C*06:02:01:01	TRUE	FALSE	C	NO
C	HLA02561	C*06:02:01:02	FALSE	FALSE	WD	NO
C	HLA00432	C*06:04	TRUE	FALSE	WD	NO
C	HLA01258	C*06:06	FALSE	FALSE	WD	NO
C	HLA01301	C*06:07	FALSE	FALSE	WD	NO
C	HLA01628	C*06:08	FALSE	FALSE	WD	NO
C	HLA01681	C*06:09	FALSE	FALSE	WD	NO

C	HLA04299	C*06:27	FALSE	TRUE	WD	NO
C	HLA00433	C*07:01:01:01	TRUE	FALSE	C	YES
C	HLA00992	C*07:01:02	FALSE	FALSE	WD	NO
C	HLA00434	C*07:02:01:01	TRUE	FALSE	C	NO
C	HLA01902	C*07:02:01:03	FALSE	FALSE	WD	NO
C	HLA00436	C*07:04:01	TRUE	FALSE	C	NO
C	HLA00437	C*07:05	TRUE	FALSE	WD	NO
C	HLA00438	C*07:06	TRUE	FALSE	C	NO
C	HLA00439	C*07:07	FALSE	FALSE	WD	NO
C	HLA00442	C*07:10	TRUE	FALSE	WD	NO
C	HLA04996	C*07:104N	FALSE	TRUE	WD	NO
C	HLA00444	C*07:12	TRUE	FALSE	WD	NO
C	HLA01079	C*07:13	FALSE	FALSE	WD	NO
C	HLA01662	C*07:17	FALSE	FALSE	WD	NO
C	HLA01672	C*07:18	TRUE	FALSE	C	NO
C	HLA01720	C*07:19	TRUE	FALSE	WD	NO
C	HLA01833	C*07:21	FALSE	FALSE	WD	NO
C	HLA01844	C*07:22	TRUE	FALSE	WD	NO
C	HLA01864	C*07:24	FALSE	FALSE	WD	NO
C	HLA01877	C*07:25	FALSE	FALSE	WD	NO
C	HLA01889	C*07:26	TRUE	FALSE	WD	NO
C	HLA01908	C*07:27:01	FALSE	FALSE	WD	NO
C	HLA02010	C*07:29	FALSE	FALSE	WD	NO
C	HLA02354	C*07:32N	FALSE	FALSE	WD	NO
C	HLA02425	C*07:35	FALSE	FALSE	WD	NO
C	HLA02598	C*07:40	FALSE	FALSE	WD	NO
C	HLA02697	C*07:43	FALSE	TRUE	WD	NO
C	HLA02789	C*07:46	FALSE	TRUE	WD	NO
C	HLA03310	C*07:56:01	FALSE	TRUE	WD	NO
C	HLA03436	C*07:60	FALSE	TRUE	WD	NO
C	HLA03439	C*07:61N	FALSE	TRUE	WD	NO
C	HLA03631	C*07:66	FALSE	TRUE	WD	NO
C	HLA03623	C*07:67	FALSE	TRUE	WD	NO
C	HLA03703	C*07:72	FALSE	TRUE	WD	NO
C	HLA00445	C*08:01:01	TRUE	FALSE	C	NO
C	HLA00446	C*08:02:01	TRUE	FALSE	C	NO
C	HLA00447	C*08:03:01	TRUE	FALSE	C	NO
C	HLA00448	C*08:04:01	TRUE	FALSE	C	YES

C	HLA00449	C*08:05	FALSE	FALSE	WD	NO
C	HLA00450	C*08:06	TRUE	FALSE	WD	NO
C	HLA01835	C*08:10	FALSE	FALSE	WD	NO
C	HLA01879	C*08:12	FALSE	FALSE	WD	NO
C	HLA02302	C*08:13	FALSE	FALSE	WD	NO
C	HLA03680	C*08:22	FALSE	TRUE	WD	NO
C	HLA00454	C*12:02:02	TRUE	FALSE	C	NO
C	HLA01145	C*12:02:03	TRUE	FALSE	WD	NO
C	HLA00455	C*12:03:01:01	TRUE	FALSE	C	NO
C	HLA00456	C*12:04:01	FALSE	FALSE	WD	NO
C	HLA00457	C*12:04:02	TRUE	FALSE	C	NO
C	HLA00458	C*12:05	TRUE	FALSE	WD	NO
C	HLA01705	C*12:09	TRUE	FALSE	WD	NO
C	HLA01878	C*12:12	FALSE	FALSE	WD	NO
C	HLA01954	C*12:13	TRUE	FALSE	WD	NO
C	HLA02304	C*12:16	FALSE	FALSE	WD	NO
C	HLA00462	C*14:02:01	TRUE	FALSE	C	NO
C	HLA01721	C*14:02:03	TRUE	FALSE	C	NO
C	HLA00464	C*14:03	TRUE	FALSE	C	NO
C	HLA00465	C*14:04	TRUE	FALSE	WD	NO
C	HLA01469	C*14:05	FALSE	FALSE	WD	NO
C	HLA03455	C*14:11	FALSE	TRUE	WD	NO
C	HLA00467	C*15:02:01	TRUE	FALSE	C	NO
C	HLA01081	C*15:02:02	FALSE	FALSE	WD	NO
C	HLA00468	C*15:03	TRUE	FALSE	WD	NO
C	HLA00469	C*15:04	TRUE	FALSE	C	NO
C	HLA00470	C*15:05:01	TRUE	FALSE	C	NO
C	HLA00471	C*15:05:02	FALSE	FALSE	WD	NO
C	HLA00472	C*15:06:01	TRUE	FALSE	C	NO
C	HLA00473	C*15:07	TRUE	FALSE	WD	NO
C	HLA00474	C*15:08	FALSE	FALSE	WD	NO
C	HLA01124	C*15:09	TRUE	FALSE	C	NO
C	HLA01424	C*15:11	TRUE	FALSE	WD	NO
C	HLA02022	C*15:13	FALSE	FALSE	WD	NO
C	HLA03813	C*15:22	FALSE	TRUE	WD	NO
C	HLA00475	C*16:01:01	TRUE	FALSE	C	NO
C	HLA00476	C*16:02:01	TRUE	FALSE	C	NO
C	HLA00478	C*16:04:01	TRUE	FALSE	C	NO

C	HLA00481	C*17:01:01:01	TRUE	FALSE	C	NO
C	HLA00993	C*17:03	TRUE	FALSE	C	NO
C	HLA00483	C*18:01	TRUE	FALSE	C	NO
C	HLA00484	C*18:02	TRUE	FALSE	C	NO
DRB1	HLA00664	DRB1*01:01:01	TRUE	FALSE	C	NO
DRB1	HLA01598	DRB1*01:01:02	TRUE	FALSE	C	NO
DRB1	HLA00665	DRB1*01:02:01	TRUE	FALSE	C	NO
DRB1	HLA00667	DRB1*01:03	TRUE	FALSE	C	NO
DRB1	HLA00668	DRB1*01:04	FALSE	FALSE	WD	NO
DRB1	HLA01307	DRB1*01:07	TRUE	FALSE	WD	NO
DRB1	HLA01811	DRB1*01:11	FALSE	FALSE	WD	NO
DRB1	HLA00671	DRB1*03:01:01:01	TRUE	FALSE	C	NO
DRB1	HLA00672	DRB1*03:01:02	TRUE	FALSE	WD	NO
DRB1	HLA00673	DRB1*03:02:01	TRUE	FALSE	C	NO
DRB1	HLA00674	DRB1*03:02:02	TRUE	FALSE	WD	NO
DRB1	HLA00675	DRB1*03:03	TRUE	FALSE	WD	NO
DRB1	HLA00676	DRB1*03:04:01	TRUE	FALSE	WD	NO
DRB1	HLA00677	DRB1*03:05:01	FALSE	FALSE	WD	NO
DRB1	HLA00678	DRB1*03:06	TRUE	FALSE	WD	NO
DRB1	HLA00679	DRB1*03:07	TRUE	FALSE	WD	NO
DRB1	HLA01087	DRB1*03:15	TRUE	FALSE	WD	NO
DRB1	HLA01152	DRB1*03:16	FALSE	FALSE	WD	NO
DRB1	HLA01557	DRB1*03:22	TRUE	FALSE	WD	NO
DRB1	HLA01614	DRB1*03:23	FALSE	FALSE	WD	NO
DRB1	HLA00685	DRB1*04:01:01	TRUE	FALSE	C	NO
DRB1	HLA00687	DRB1*04:02:01	TRUE	FALSE	C	NO
DRB1	HLA00688	DRB1*04:03:01	TRUE	FALSE	C	NO
DRB1	HLA01009	DRB1*04:03:02	TRUE	FALSE	WD	NO
DRB1	HLA00689	DRB1*04:04:01	TRUE	FALSE	C	NO
DRB1	HLA00690	DRB1*04:05:01	TRUE	FALSE	C	NO
DRB1	HLA00692	DRB1*04:06:01	TRUE	FALSE	C	NO
DRB1	HLA00693	DRB1*04:07:01	TRUE	FALSE	C	NO
DRB1	HLA00694	DRB1*04:08:01	TRUE	FALSE	C	NO
DRB1	HLA00695	DRB1*04:09	TRUE	FALSE	C	NO
DRB1	HLA00696	DRB1*04:10:01	TRUE	FALSE	C	YES
DRB1	HLA00697	DRB1*04:11:01	TRUE	FALSE	C	YES
DRB1	HLA00698	DRB1*04:12	TRUE	FALSE	WD	NO
DRB1	HLA00699	DRB1*04:13	TRUE	FALSE	WD	NO

DRB1	HLA00700	DRB1*04:14	TRUE	FALSE	WD	NO
DRB1	HLA00701	DRB1*04:15	TRUE	FALSE	WD	NO
DRB1	HLA00702	DRB1*04:16	TRUE	FALSE	WD	NO
DRB1	HLA04408	DRB1*04:17:02	FALSE	TRUE	C	NO
DRB1	HLA00704	DRB1*04:18	TRUE	FALSE	WD	NO
DRB1	HLA00705	DRB1*04:19	FALSE	FALSE	WD	NO
DRB1	HLA00708	DRB1*04:22	FALSE	FALSE	WD	NO
DRB1	HLA00709	DRB1*04:23	FALSE	FALSE	WD	NO
DRB1	HLA00711	DRB1*04:25	FALSE	FALSE	WD	NO
DRB1	HLA00712	DRB1*04:26	TRUE	FALSE	WD	NO
DRB1	HLA01088	DRB1*04:33	FALSE	FALSE	WD	NO
DRB1	HLA01235	DRB1*04:35	TRUE	FALSE	WD	NO
DRB1	HLA01345	DRB1*04:38	TRUE	FALSE	C	NO
DRB1	HLA01454	DRB1*04:40	TRUE	FALSE	WD	NO
DRB1	HLA01459	DRB1*04:41	FALSE	FALSE	WD	NO
DRB1	HLA01817	DRB1*04:50	FALSE	FALSE	WD	NO
DRB1	HLA02039	DRB1*04:51	FALSE	FALSE	WD	NO
DRB1	HLA02305	DRB1*04:54	FALSE	FALSE	WD	NO
DRB1	HLA00719	DRB1*07:01:01:01	TRUE	FALSE	C	NO
DRB1	HLA00721	DRB1*07:03	FALSE	FALSE	WD	NO
DRB1	HLA01415	DRB1*07:05	FALSE	FALSE	WD	NO
DRB1	HLA01620	DRB1*07:07	FALSE	FALSE	WD	NO
DRB1	HLA02495	DRB1*07:11	FALSE	FALSE	WD	NO
DRB1	HLA02912	DRB1*07:13	FALSE	TRUE	WD	NO
DRB1	HLA00723	DRB1*08:01:01	TRUE	FALSE	C	NO
DRB1	HLA00724	DRB1*08:02:01	TRUE	FALSE	C	NO
DRB1	HLA01416	DRB1*08:02:03	FALSE	FALSE	WD	NO
DRB1	HLA00727	DRB1*08:03:02	TRUE	FALSE	C	NO
DRB1	HLA00728	DRB1*08:04:01	TRUE	FALSE	C	NO
DRB1	HLA00729	DRB1*08:04:02	TRUE	FALSE	WD	NO
DRB1	HLA01414	DRB1*08:04:04	TRUE	FALSE	C	NO
DRB1	HLA00731	DRB1*08:05	FALSE	FALSE	WD	NO
DRB1	HLA00732	DRB1*08:06	TRUE	FALSE	C	NO
DRB1	HLA00733	DRB1*08:07	TRUE	FALSE	C	NO
DRB1	HLA00734	DRB1*08:08	FALSE	FALSE	WD	NO
DRB1	HLA00735	DRB1*08:09	TRUE	FALSE	WD	NO
DRB1	HLA00736	DRB1*08:10	TRUE	FALSE	C	NO
DRB1	HLA00737	DRB1*08:11	TRUE	FALSE	C	NO

DRB1	HLA00738	DRB1*08:12	FALSE	FALSE	WD	NO
DRB1	HLA00739	DRB1*08:13	TRUE	FALSE	WD	NO
DRB1	HLA00740	DRB1*08:14	TRUE	FALSE	WD	NO
DRB1	HLA00743	DRB1*08:17	FALSE	FALSE	WD	NO
DRB1	HLA00744	DRB1*08:18	TRUE	FALSE	WD	NO
DRB1	HLA00745	DRB1*08:19	FALSE	FALSE	WD	NO
DRB1	HLA00746	DRB1*08:20	FALSE	FALSE	WD	NO
DRB1	HLA01814	DRB1*08:26	FALSE	FALSE	WD	NO
DRB1	HLA01860	DRB1*08:28	FALSE	FALSE	WD	NO
DRB1	HLA00749	DRB1*09:01:02	TRUE	FALSE	C	NO
DRB1	HLA02018	DRB1*09:04	FALSE	FALSE	WD	NO
DRB1	HLA02682	DRB1*09:06	FALSE	FALSE	WD	NO
DRB1	HLA00750	DRB1*10:01:01	TRUE	FALSE	C	NO
DRB1	HLA00751	DRB1*11:01:01	TRUE	FALSE	C	NO
DRB1	HLA00752	DRB1*11:01:02	TRUE	FALSE	C	NO
DRB1	HLA00754	DRB1*11:02:01	TRUE	FALSE	C	NO
DRB1	HLA00755	DRB1*11:03	TRUE	FALSE	C	NO
DRB1	HLA00756	DRB1*11:04:01	TRUE	FALSE	C	NO
DRB1	HLA00757	DRB1*11:04:02	TRUE	FALSE	C	NO
DRB1	HLA00758	DRB1*11:05	TRUE	FALSE	WD	NO
DRB1	HLA00759	DRB1*11:06:01	TRUE	FALSE	C	NO
DRB1	HLA00760	DRB1*11:07	TRUE	FALSE	WD	NO
DRB1	HLA00761	DRB1*11:08:01	FALSE	FALSE	WD	NO
DRB1	HLA00763	DRB1*11:09	TRUE	FALSE	C	NO
DRB1	HLA00764	DRB1*11:10:01	TRUE	FALSE	C	NO
DRB1	HLA00765	DRB1*11:11:01	TRUE	FALSE	C	NO
DRB1	HLA00766	DRB1*11:12:01	TRUE	FALSE	C	NO
DRB1	HLA00767	DRB1*11:13:01	TRUE	FALSE	WD	NO
DRB1	HLA00768	DRB1*11:14:01	TRUE	FALSE	WD	NO
DRB1	HLA00769	DRB1*11:15	TRUE	FALSE	C	NO
DRB1	HLA00770	DRB1*11:16	FALSE	FALSE	WD	NO
DRB1	HLA00771	DRB1*11:17	TRUE	FALSE	C	NO
DRB1	HLA00772	DRB1*11:18	TRUE	FALSE	WD	NO
DRB1	HLA00773	DRB1*11:19:01	TRUE	FALSE	C	NO
DRB1	HLA00774	DRB1*11:20	FALSE	FALSE	WD	NO
DRB1	HLA00778	DRB1*11:24	FALSE	FALSE	WD	NO
DRB1	HLA00779	DRB1*11:25	FALSE	FALSE	WD	NO
DRB1	HLA00782	DRB1*11:28:01	FALSE	FALSE	WD	NO



DRB1	HLA00783	DRB1*11:29	FALSE	FALSE	WD	NO
DRB1	HLA00786	DRB1*11:32	FALSE	FALSE	WD	NO
DRB1	HLA00788	DRB1*11:34	TRUE	FALSE	WD	NO
DRB1	HLA01090	DRB1*11:36	FALSE	FALSE	WD	NO
DRB1	HLA01156	DRB1*11:37:01	FALSE	FALSE	WD	YES
DRB1	HLA01273	DRB1*11:39	TRUE	FALSE	WD	NO
DRB1	HLA01447	DRB1*11:42	TRUE	FALSE	WD	NO
DRB1	HLA01552	DRB1*11:43	FALSE	FALSE	WD	NO
DRB1	HLA01779	DRB1*11:45	TRUE	FALSE	WD	NO
DRB1	HLA01812	DRB1*11:47	FALSE	FALSE	WD	NO
DRB1	HLA02577	DRB1*11:56	FALSE	FALSE	WD	NO
DRB1	HLA03072	DRB1*11:66	FALSE	TRUE	WD	NO
DRB1	HLA03385	DRB1*11:69	FALSE	TRUE	WD	NO
DRB1	HLA00789	DRB1*12:01:01	TRUE	FALSE	C	NO
DRB1	HLA00790	DRB1*12:02:01	TRUE	FALSE	C	NO
DRB1	HLA00791	DRB1*12:02:02	TRUE	FALSE	C	NO
DRB1	HLA00794	DRB1*12:04	FALSE	FALSE	WD	NO
DRB1	HLA00795	DRB1*12:05	FALSE	FALSE	WD	NO
DRB1	HLA01929	DRB1*12:10	FALSE	FALSE	WD	NO
DRB1	HLA00797	DRB1*13:01:01	TRUE	FALSE	C	NO
DRB1	HLA01689	DRB1*13:01:03	TRUE	FALSE	WD	NO
DRB1	HLA00798	DRB1*13:02:01	TRUE	FALSE	C	NO
DRB1	HLA00799	DRB1*13:03:01	TRUE	FALSE	C	NO
DRB1	HLA00800	DRB1*13:03:02	TRUE	FALSE	WD	NO
DRB1	HLA00801	DRB1*13:04	TRUE	FALSE	C	NO
DRB1	HLA00802	DRB1*13:05:01	TRUE	FALSE	C	NO
DRB1	HLA00803	DRB1*13:06	TRUE	FALSE	WD	NO
DRB1	HLA00804	DRB1*13:07:01	TRUE	FALSE	WD	NO
DRB1	HLA00805	DRB1*13:07:02	TRUE	FALSE	C	NO
DRB1	HLA00806	DRB1*13:08	FALSE	FALSE	WD	NO
DRB1	HLA00807	DRB1*13:09	FALSE	FALSE	WD	NO
DRB1	HLA00808	DRB1*13:10	TRUE	FALSE	C	NO
DRB1	HLA00809	DRB1*13:11:01	TRUE	FALSE	WD	NO
DRB1	HLA00810	DRB1*13:12:01	TRUE	FALSE	C	NO
DRB1	HLA00811	DRB1*13:13	TRUE	FALSE	WD	NO
DRB1	HLA00812	DRB1*13:14:01	TRUE	FALSE	C	NO
DRB1	HLA00813	DRB1*13:15	TRUE	FALSE	WD	NO
DRB1	HLA00814	DRB1*13:16	TRUE	FALSE	WD	NO

DRB1	HLA00815	DRB1*13:17	FALSE	FALSE	WD	NO
DRB1	HLA00816	DRB1*13:18	TRUE	FALSE	WD	NO
DRB1	HLA00817	DRB1*13:19	FALSE	FALSE	WD	NO
DRB1	HLA00818	DRB1*13:20	TRUE	FALSE	C	NO
DRB1	HLA00820	DRB1*13:22	FALSE	FALSE	WD	NO
DRB1	HLA00823	DRB1*13:25	FALSE	FALSE	WD	NO
DRB1	HLA00824	DRB1*13:26:01	FALSE	FALSE	WD	YES
DRB1	HLA00825	DRB1*13:27	FALSE	FALSE	WD	NO
DRB1	HLA00827	DRB1*13:29	TRUE	FALSE	WD	NO
DRB1	HLA00829	DRB1*13:31	TRUE	FALSE	WD	NO
DRB1	HLA01101	DRB1*13:36	TRUE	FALSE	WD	NO
DRB1	HLA01150	DRB1*13:37	FALSE	FALSE	WD	NO
DRB1	HLA01151	DRB1*13:38	FALSE	FALSE	WD	NO
DRB1	HLA01166	DRB1*13:39	FALSE	FALSE	WD	NO
DRB1	HLA01209	DRB1*13:40	FALSE	FALSE	WD	NO
DRB1	HLA01212	DRB1*13:41	FALSE	FALSE	WD	NO
DRB1	HLA01236	DRB1*13:42	FALSE	FALSE	WD	NO
DRB1	HLA01456	DRB1*13:49	FALSE	FALSE	WD	NO
DRB1	HLA01724	DRB1*13:56	TRUE	FALSE	WD	NO
DRB1	HLA01737	DRB1*13:59	FALSE	FALSE	WD	NO
DRB1	HLA01754	DRB1*13:60	FALSE	FALSE	WD	NO
DRB1	HLA02786	DRB1*13:76	FALSE	TRUE	WD	NO
DRB1	HLA03058	DRB1*13:81	FALSE	TRUE	WD	NO
DRB1	HLA03168	DRB1*13:82	FALSE	TRUE	WD	NO
DRB1	HLA00833	DRB1*14:01:01	TRUE	FALSE	C	NO
DRB1	HLA00834	DRB1*14:02	TRUE	FALSE	C	NO
DRB1	HLA00835	DRB1*14:03:01	TRUE	FALSE	C	NO
DRB1	HLA00836	DRB1*14:04	TRUE	FALSE	C	NO
DRB1	HLA00837	DRB1*14:05:01	TRUE	FALSE	C	NO
DRB1	HLA00838	DRB1*14:06:01	TRUE	FALSE	C	NO
DRB1	HLA00839	DRB1*14:07:01	TRUE	FALSE	C	NO
DRB1	HLA00840	DRB1*14:08	TRUE	FALSE	WD	NO
DRB1	HLA00841	DRB1*14:09	TRUE	FALSE	WD	NO
DRB1	HLA00842	DRB1*14:10	TRUE	FALSE	WD	NO
DRB1	HLA00843	DRB1*14:11	TRUE	FALSE	WD	NO
DRB1	HLA00844	DRB1*14:12:01	TRUE	FALSE	WD	NO
DRB1	HLA00845	DRB1*14:13	TRUE	FALSE	WD	NO
DRB1	HLA00846	DRB1*14:14	TRUE	FALSE	WD	NO

DRB1	HLA00847	DRB1*14:15	TRUE	FALSE	WD	NO
DRB1	HLA00848	DRB1*14:16	TRUE	FALSE	WD	NO
DRB1	HLA00849	DRB1*14:17	TRUE	FALSE	C	NO
DRB1	HLA00850	DRB1*14:18	TRUE	FALSE	C	NO
DRB1	HLA00851	DRB1*14:19	FALSE	FALSE	WD	NO
DRB1	HLA00852	DRB1*14:20	TRUE	FALSE	WD	NO
DRB1	HLA00853	DRB1*14:21	TRUE	FALSE	WD	NO
DRB1	HLA00854	DRB1*14:22	FALSE	FALSE	WD	NO
DRB1	HLA00856	DRB1*14:24	TRUE	FALSE	C	NO
DRB1	HLA00857	DRB1*14:25	TRUE	FALSE	WD	NO
DRB1	HLA00860	DRB1*14:28	FALSE	FALSE	WD	NO
DRB1	HLA00861	DRB1*14:29	FALSE	FALSE	WD	NO
DRB1	HLA01011	DRB1*14:33	FALSE	FALSE	WD	NO
DRB1	HLA01734	DRB1*14:48	TRUE	FALSE	WD	NO
DRB1	HLA02371	DRB1*14:54:01	TRUE	FALSE	C	YES
DRB1	HLA02572	DRB1*14:61	FALSE	FALSE	WD	NO
DRB1	HLA03041	DRB1*14:70	FALSE	TRUE	WD	NO
DRB1	HLA00865	DRB1*15:01:01:01	TRUE	FALSE	C	NO
DRB1	HLA00867	DRB1*15:02:01	TRUE	FALSE	C	NO
DRB1	HLA00868	DRB1*15:02:02	TRUE	FALSE	C	NO
DRB1	HLA00870	DRB1*15:03:01:01	TRUE	FALSE	C	NO
DRB1	HLA00871	DRB1*15:04	TRUE	FALSE	C	NO
DRB1	HLA00873	DRB1*15:06:01	TRUE	FALSE	C	YES
DRB1	HLA00874	DRB1*15:07:01	FALSE	FALSE	WD	YES
DRB1	HLA01211	DRB1*15:10	TRUE	FALSE	WD	NO
DRB1	HLA01340	DRB1*15:11	FALSE	FALSE	WD	NO
DRB1	HLA01842	DRB1*15:14	FALSE	FALSE	WD	NO
DRB1	HLA02326	DRB1*15:18	FALSE	FALSE	WD	NO
DRB1	HLA02571	DRB1*15:20	FALSE	FALSE	WD	NO
DRB1	HLA02575	DRB1*15:22	FALSE	FALSE	WD	NO
DRB1	HLA03033	DRB1*15:23	FALSE	TRUE	WD	NO
DRB1	HLA03035	DRB1*15:24	FALSE	TRUE	WD	NO
DRB1	HLA04365	DRB1*15:38	FALSE	TRUE	WD	NO
DRB1	HLA00876	DRB1*16:01:01	TRUE	FALSE	C	NO
DRB1	HLA00878	DRB1*16:02:01	TRUE	FALSE	C	NO
DRB1	HLA00881	DRB1*16:04	TRUE	FALSE	C	NO
DRB1	HLA00882	DRB1*16:05:01	TRUE	FALSE	WD	NO
DRB1	HLA00884	DRB1*16:07	TRUE	FALSE	C	NO

DRB1	HLA02345	DRB1*16:10	FALSE	FALSE	WD	NO
DRB1	HLA03043	DRB1*16:12	FALSE	TRUE	WD	NO
DRB3	HLA00887	DRB3*01:01:02:01	TRUE	FALSE	C	NO
DRB3	HLA00890	DRB3*01:02	FALSE	FALSE	WD	NO
DRB3	HLA00891	DRB3*01:03	FALSE	FALSE	WD	NO
DRB3	HLA00894	DRB3*02:01	TRUE	FALSE	C	NO
DRB3	HLA00895	DRB3*02:02:01:01	TRUE	FALSE	C	NO
DRB3	HLA01094	DRB3*02:02:02	FALSE	FALSE	WD	NO
DRB3	HLA00896	DRB3*02:03	TRUE	FALSE	WD	NO
DRB3	HLA00899	DRB3*02:06	TRUE	FALSE	WD	NO
DRB3	HLA01157	DRB3*02:10	TRUE	FALSE	C	NO
DRB3	HLA01165	DRB3*02:11	TRUE	FALSE	WD	NO
DRB3	HLA01570	DRB3*02:17	TRUE	FALSE	WD	NO
DRB3	HLA00902	DRB3*03:01:01	TRUE	FALSE	C	NO
DRB4	HLA00905	DRB4*01:01:01:01	TRUE	FALSE	C	NO
DRB4	HLA00907	DRB4*01:02	TRUE	FALSE	C	NO
DRB4	HLA00908	DRB4*01:03:01:01	TRUE	FALSE	C	NO
DRB4	HLA00909	DRB4*01:03:01:02N	TRUE	FALSE	C	NO
DRB4	HLA00910	DRB4*01:03:02	FALSE	FALSE	WD	NO
DRB4	HLA01225	DRB4*01:03:03	TRUE	FALSE	C	NO
DRB4	HLA00913	DRB4*02:01N	TRUE	FALSE	C	NO
DRB4	HLA00914	DRB4*03:01N	TRUE	FALSE	WD	NO
DRB5	HLA00915	DRB5*01:01:01	TRUE	FALSE	C	NO
DRB5	HLA00916	DRB5*01:01:02	TRUE	FALSE	WD	NO
DRB5	HLA00917	DRB5*01:02	TRUE	FALSE	C	NO
DRB5	HLA00918	DRB5*01:03	TRUE	FALSE	C	NO
DRB5	HLA00923	DRB5*01:08N	TRUE	FALSE	C	NO
DRB5	HLA01012	DRB5*01:10N	TRUE	FALSE	WD	NO
DRB5	HLA00926	DRB5*02:02	TRUE	FALSE	C	NO
DRB5	HLA00927	DRB5*02:03	TRUE	FALSE	WD	NO
DQA1	HLA00601	DQA1*01:01:01	TRUE	FALSE	C	NO
DQA1	HLA01409	DQA1*01:01:02	TRUE	FALSE	C	NO
DQA1	HLA00602	DQA1*01:02:01:01	TRUE	FALSE	C	NO
DQA1	HLA00603	DQA1*01:02:02	FALSE	FALSE	WD	NO
DQA1	HLA00604	DQA1*01:03:01:01	TRUE	FALSE	C	NO
DQA1	HLA00605	DQA1*01:04:01:01	TRUE	FALSE	C	NO
DQA1	HLA00606	DQA1*01:05	TRUE	FALSE	C	NO
DQA1	HLA00607	DQA1*02:01	TRUE	FALSE	C	NO

DQA1	HLA00608	DQA1*03:01:01	TRUE	FALSE	C	NO
DQA1	HLA00610	DQA1*03:02	TRUE	FALSE	C	NO
DQA1	HLA00611	DQA1*03:03:01	TRUE	FALSE	C	YES
DQA1	HLA00612	DQA1*04:01:01	TRUE	FALSE	C	NO
DQA1	HLA00613	DQA1*05:01:01:01	TRUE	FALSE	C	NO
DQA1	HLA00616	DQA1*05:02	FALSE	FALSE	WD	NO
DQA1	HLA00617	DQA1*05:03	TRUE	FALSE	C	NO
DQA1	HLA00619	DQA1*05:05:01:01	TRUE	FALSE	C	NO
DQA1	HLA02341	DQA1*05:08	FALSE	FALSE	C	NO
DQA1	HLA02433	DQA1*05:09	TRUE	FALSE	WD	NO
DQA1	HLA00620	DQA1*06:01:01	TRUE	FALSE	WD	NO
DQB1	HLA00622	DQB1*02:01:01	TRUE	FALSE	C	NO
DQB1	HLA00623	DQB1*02:02	TRUE	FALSE	C	NO
DQB1	HLA00624	DQB1*02:03	TRUE	FALSE	C	NO
DQB1	HLA00625	DQB1*03:01:01:01	TRUE	FALSE	C	NO
DQB1	HLA02688	DQB1*03:01:03	FALSE	FALSE	WD	NO
DQB1	HLA03175	DQB1*03:01:04	FALSE	TRUE	WD	NO
DQB1	HLA00627	DQB1*03:02:01	TRUE	FALSE	C	NO
DQB1	HLA01770	DQB1*03:02:02	FALSE	FALSE	WD	NO
DQB1	HLA00629	DQB1*03:03:02:01	TRUE	FALSE	C	NO
DQB1	HLA00630	DQB1*03:04	TRUE	FALSE	C	NO
DQB1	HLA00631	DQB1*03:05:01	TRUE	FALSE	C	NO
DQB1	HLA00635	DQB1*03:09	TRUE	FALSE	C	NO
DQB1	HLA01589	DQB1*03:13	FALSE	FALSE	WD	NO
DQB1	HLA02690	DQB1*03:19	TRUE	FALSE	C	NO
DQB1	HLA00636	DQB1*04:01:01	TRUE	FALSE	C	NO
DQB1	HLA00637	DQB1*04:02:01	TRUE	FALSE	C	NO
DQB1	HLA00638	DQB1*05:01:01:01	TRUE	FALSE	C	NO
DQB1	HLA00639	DQB1*05:02:01	TRUE	FALSE	C	NO
DQB1	HLA00640	DQB1*05:03:01:01	TRUE	FALSE	C	NO
DQB1	HLA00642	DQB1*05:04	TRUE	FALSE	C	NO
DQB1	HLA00643	DQB1*06:01:01	TRUE	FALSE	C	NO
DQB1	HLA00644	DQB1*06:01:02	TRUE	FALSE	WD	NO
DQB1	HLA00646	DQB1*06:02:01	TRUE	FALSE	C	NO
DQB1	HLA00647	DQB1*06:03:01	TRUE	FALSE	C	NO
DQB1	HLA00648	DQB1*06:04:01	TRUE	FALSE	C	NO
DQB1	HLA00649	DQB1*06:05:01	FALSE	FALSE	WD	NO
DQB1	HLA00653	DQB1*06:08:01	TRUE	FALSE	C	NO

DQB1	HLA00654	DQB1*06:09	TRUE	FALSE	C	NO
DQB1	HLA00655	DQB1*06:10	TRUE	FALSE	WD	NO
DQB1	HLA00656	DQB1*06:11:01	TRUE	FALSE	WD	NO
DPA1	HLA00499	DPA1*01:03:01:01	FALSE	FALSE	C	NO
DPA1	HLA00501	DPA1*01:04	FALSE	FALSE	C	NO
DPA1	HLA00504	DPA1*02:01:01	FALSE	FALSE	C	NO
DPA1	HLA00508	DPA1*02:02:01	FALSE	FALSE	C	NO
DPA1	HLA00511	DPA1*03:01	FALSE	FALSE	C	NO
DPA1	HLA00513	DPA1*04:01	FALSE	FALSE	C	NO
DPB1	HLA00514	DPB1*01:01:01	TRUE	FALSE	C	NO
DPB1	HLA00515	DPB1*01:01:02	TRUE	FALSE	C	NO
DPB1	HLA00517	DPB1*02:01:02	TRUE	FALSE	C	NO
DPB1	HLA01473	DPB1*02:01:04	FALSE	FALSE	WD	NO
DPB1	HLA00519	DPB1*02:02	TRUE	FALSE	C	NO
DPB1	HLA00520	DPB1*03:01:01	TRUE	FALSE	C	NO
DPB1	HLA00521	DPB1*04:01:01:01	TRUE	FALSE	C	NO
DPB1	HLA00522	DPB1*04:02:01:01	TRUE	FALSE	C	NO
DPB1	HLA00523	DPB1*05:01:01	TRUE	FALSE	C	NO
DPB1	HLA00524	DPB1*06:01	TRUE	FALSE	C	NO
DPB1	HLA00526	DPB1*09:01	TRUE	FALSE	C	NO
DPB1	HLA00527	DPB1*10:01	TRUE	FALSE	C	NO
DPB1	HLA00528	DPB1*11:01:01	TRUE	FALSE	C	NO
DPB1	HLA00530	DPB1*13:01	TRUE	FALSE	C	NO
DPB1	HLA00531	DPB1*14:01	TRUE	FALSE	C	NO
DPB1	HLA00532	DPB1*15:01	TRUE	FALSE	C	NO
DPB1	HLA00533	DPB1*16:01	TRUE	FALSE	C	NO
DPB1	HLA00534	DPB1*17:01	TRUE	FALSE	C	NO
DPB1	HLA00535	DPB1*18:01	TRUE	FALSE	C	NO
DPB1	HLA00536	DPB1*19:01	TRUE	FALSE	C	NO
DPB1	HLA00537	DPB1*20:01:01	TRUE	FALSE	C	NO
DPB1	HLA00539	DPB1*21:01	TRUE	FALSE	C	NO
DPB1	HLA00540	DPB1*22:01	TRUE	FALSE	WD	NO
DPB1	HLA00541	DPB1*23:01	TRUE	FALSE	C	NO
DPB1	HLA00545	DPB1*26:01:02	FALSE	FALSE	C	NO
DPB1	HLA00546	DPB1*27:01	TRUE	FALSE	C	NO
DPB1	HLA00547	DPB1*28:01	TRUE	FALSE	C	NO
DPB1	HLA00548	DPB1*29:01	TRUE	FALSE	C	NO
DPB1	HLA00549	DPB1*30:01	TRUE	FALSE	C	NO

DPB1	HLA00550	DPB1*31:01	TRUE	FALSE	C	NO
DPB1	HLA00552	DPB1*33:01	TRUE	FALSE	WD	NO
DPB1	HLA00553	DPB1*34:01	TRUE	FALSE	C	NO
DPB1	HLA00554	DPB1*35:01:01	TRUE	FALSE	C	NO
DPB1	HLA00555	DPB1*36:01	TRUE	FALSE	WD	NO
DPB1	HLA00557	DPB1*38:01	TRUE	FALSE	WD	NO
DPB1	HLA00558	DPB1*39:01	TRUE	FALSE	C	NO
DPB1	HLA00559	DPB1*40:01	TRUE	FALSE	WD	NO
DPB1	HLA00564	DPB1*45:01	TRUE	FALSE	C	NO
DPB1	HLA00565	DPB1*46:01	TRUE	FALSE	C	NO
DPB1	HLA00566	DPB1*47:01	TRUE	FALSE	WD	NO
DPB1	HLA00568	DPB1*49:01	FALSE	FALSE	WD	NO
DPB1	HLA00570	DPB1*51:01	TRUE	FALSE	C	NO
DPB1	HLA00574	DPB1*55:01	TRUE	FALSE	C	NO
DPB1	HLA00576	DPB1*57:01	FALSE	FALSE	WD	NO
DPB1	HLA00578	DPB1*59:01	TRUE	FALSE	C	NO
DPB1	HLA00582	DPB1*63:01	TRUE	FALSE	C	NO
DPB1	HLA00588	DPB1*69:01	TRUE	FALSE	WD	NO
DPB1	HLA00591	DPB1*72:01	TRUE	FALSE	WD	NO
DPB1	HLA00597	DPB1*78:01	TRUE	FALSE	WD	NO
DPB1	HLA00600	DPB1*81:01	TRUE	FALSE	C	NO
DPB1	HLA01162	DPB1*85:01	TRUE	FALSE	C	NO
DPB1	HLA02046	DPB1*104:01	FALSE	FALSE	WD	NO
DPB1	HLA02047	DPB1*105:01	TRUE	FALSE	C	NO
DPB1	HLA02048	DPB1*106:01	FALSE	FALSE	WD	NO

Table 2. CWD 2.0.0 Categories for G Groups

Locus	IMGT/HLA 3.9.0 G Group	CWD 2.0.0 Category
A	A*01:01:01G	C
A	A*02:01:01G	C
A	A*02:03:01G	C
A	A*02:05:01G	C
A	A*02:06:01G	C
A	A*02:07:01G	C
A	A*02:11:01G	C
A	A*02:16:01G	WD
A	A*02:17:01G	C
A	A*02:22:01G	C
A	A*03:01:01G	C
A	A*11:01:01G	C
A	A*11:02:01G	C
A	A*23:01:01G	C
A	A*24:02:01G	C
A	A*24:03:01G	C
A	A*24:05:01G	WD
A	A*25:01:01G	C
A	A*26:01:01G	C
A	A*29:01:01G	C
A	A*29:02:01G	C
A	A*30:01:01G	C
A	A*30:02:01G	C
A	A*31:01:02G	C
A	A*32:01:01G	C
A	A*33:01:01G	C
A	A*33:03:01G	C
A	A*66:01:01G	C
A	A*68:01:01G	C
A	A*68:01:02G	C
A	A*68:02:01G	C
A	A*74:01:01G	C
B	B*07:02:01G	C
B	B*07:05:01G	C
B	B*08:01:01G	C
B	B*13:01:01G	C
B	B*13:02:01G	C
B	B*15:01:01G	C
B	B*15:02:01G	C
B	B*15:03:01G	C
B	B*15:07:01G	C
B	B*15:11:01G	C
B	B*15:12:01G	C
B	B*15:17:01G	C
B	B*15:18:01G	C
B	B*15:25:01G	C
B	B*18:01:01G	C
B	B*27:04:01G	C
B	B*27:05:02G	C
B	B*27:07:01G	C



B	B*35:01:01G	C
B	B*35:03:01G	C
B	B*35:43:01G	C
B	B*37:01:01G	C
B	B*38:02:01G	C
B	B*39:01:01G	C
B	B*40:01:01G	C
B	B*40:02:01G	C
B	B*40:06:01G	C
B	B*44:02:01G	C
B	B*44:03:01G	C
B	B*45:01:01G	C
B	B*46:01:01G	C
B	B*47:01:01G	C
B	B*48:01:01G	C
B	B*51:01:01G	C
B	B*52:01:01G	C
B	B*54:01:01G	C
B	B*55:01:01G	C
B	B*55:02:01G	C
B	B*56:01:01G	C
B	B*57:01:01G	C
B	B*58:01:01G	C
B	B*59:01:01G	C
B	B*81:01:01G	C
C	C*01:02:01G	C
C	C*01:03:01G	WD
C	C*02:02:02G	C
C	C*03:02:01G	C
C	C*03:03:01G	C
C	C*03:04:01G	C
C	C*04:01:01G	C
C	C*05:01:01G	C
C	C*06:02:01G	C
C	C*07:01:01G	C
C	C*07:02:01G	C
C	C*07:04:01G	C
C	C*08:01:01G	C
C	C*08:02:01G	C
C	C*08:03:01G	C
C	C*12:02:01G	C
C	C*12:03:01G	C
C	C*14:02:01G	C
C	C*15:02:01G	C
C	C*15:05:01G	C
C	C*16:02:01G	C
C	C*17:01:01G	C
C	C*18:01:01G	C
DRB1	DRB1*03:01:01G	C
DRB1	DRB1*04:06:01G	C
DRB1	DRB1*04:07:01G	C
DRB1	DRB1*07:01:01G	C
DRB1	DRB1*08:01:01G	C

DRB1	DRB1*11:01:01G	C
DRB1	DRB1*11:06:01G	C
DRB1	DRB1*11:11:01G	C
DRB1	DRB1*11:13:01G	WD
DRB1	DRB1*12:01:01G	C
DRB1	DRB1*13:01:01G	C
DRB1	DRB1*14:01:01G	C
DRB1	DRB1*15:01:01G	C
DRB1	DRB1*15:03:01G	C
DRB3	DRB3*01:01:02G	C
DRB3	DRB3*02:01:01G	C
DRB3	DRB3*02:02:01G	C
DRB3	DRB3*03:01:01G	C
DRB4	DRB4*01:01:01G	C
DRB5	DRB5*01:02:01G	C
DRB5	DRB5*02:02:01G	C
DQA1	DQA1*01:01:01G	C
DQA1	DQA1*01:02:01G	C
DQA1	DQA1*01:03:01G	C
DQA1	DQA1*03:01:01G	C
DQA1	DQA1*04:01:01G	C
DQA1	DQA1*05:01:01G	C
DQA1	DQA1*06:01:01G	WD
DQB1	DQB1*02:01:01G	C
DQB1	DQB1*03:01:01G	C
DQB1	DQB1*03:02:01G	C
DQB1	DQB1*03:03:02G	C
DQB1	DQB1*04:01:01G	C
DQB1	DQB1*05:01:01G	C
DQB1	DQB1*05:02:01G	C
DQB1	DQB1*05:03:01G	C
DQB1	DQB1*06:01:01G	C
DQB1	DQB1*06:02:01G	C
DQB1	DQB1*06:03:01G	C
DQB1	DQB1*06:04:01G	C
DPA1	DPA1*01:03:01G	C
DPB1	DPB1*03:01:01G	C
DPB1	DPB1*04:01:01G	C
DPB1	DPB1*04:02:01G	C
DPB1	DPB1*05:01:01G	C
DPB1	DPB1*13:01:01G	C
DPB1	DPB1*17:01:01G	C
DPB1	DPB1*19:01:01G	C
DPB1	DPB1*23:01:01G	C

Table 3. CWD 2.0.0 Categories for P Groups

Locus	IMGT/HLA 3.9.0 P Group	CWD 2.0.0 Category
A	A*01:01P	C
A	A*02:01P	C
A	A*02:03P	C
A	A*02:05P	C
A	A*02:06P	C
A	A*02:07P	C
A	A*02:11P	C
A	A*02:16P	WD
A	A*02:17P	C
A	A*02:20P	C
A	A*02:22P	C
A	A*02:24P	C
A	A*02:35P	WD
A	A*02:60P	C
A	A*02:74P	WD
A	A*03:01P	C
A	A*03:02P	C
A	A*03:05P	C
A	A*03:17P	WD
A	A*03:22P	WD
A	A*11:01P	C
A	A*11:02P	C
A	A*23:01P	C
A	A*23:03P	WD
A	A*24:02P	C
A	A*24:03P	C
A	A*24:05P	WD
A	A*24:13P	WD
A	A*25:01P	C
A	A*26:01P	C
A	A*26:03P	C
A	A*26:07P	WD
A	A*29:01P	C
A	A*29:02P	C
A	A*30:01P	C
A	A*30:02P	C
A	A*30:04P	C
A	A*30:11P	WD
A	A*31:01P	C
A	A*32:01P	C
A	A*33:01P	C
A	A*33:03P	C
A	A*34:01P	C
A	A*34:02P	C
A	A*66:01P	C
A	A*68:01P	C
A	A*68:02P	C
A	A*68:03P	C
A	A*68:08P	WD
A	A*74:01P	C

B	B*07:02P	C
B	B*07:05P	C
B	B*08:01P	C
B	B*13:01P	C
B	B*13:02P	C
B	B*14:01P	C
B	B*14:02P	C
B	B*15:01P	C
B	B*15:02P	C
B	B*15:03P	C
B	B*15:05P	WD
B	B*15:07P	C
B	B*15:10P	C
B	B*15:11P	C
B	B*15:12P	C
B	B*15:13P	C
B	B*15:16P	C
B	B*15:17P	C
B	B*15:18P	C
B	B*15:25P	C
B	B*15:27P	WD
B	B*15:38P	WD
B	B*15:39P	C
B	B*15:47P	WD
B	B*18:01P	C
B	B*27:02P	C
B	B*27:04P	C
B	B*27:05P	C
B	B*27:07P	C
B	B*35:01P	C
B	B*35:02P	C
B	B*35:03P	C
B	B*35:04P	C
B	B*35:05P	C
B	B*35:08P	C
B	B*35:09P	WD
B	B*35:11P	WD
B	B*35:12P	C
B	B*35:14P	C
B	B*35:20P	C
B	B*35:24P	WD
B	B*35:29P	WD
B	B*35:32P	WD
B	B*35:43P	C
B	B*37:01P	C
B	B*38:01P	C
B	B*38:02P	C
B	B*39:01P	C
B	B*39:02P	C
B	B*39:05P	C
B	B*39:06P	C
B	B*39:10P	C
B	B*39:13P	WD

B	B*39:24P	C
B	B*39:39P	WD
B	B*40:01P	C
B	B*40:02P	C
B	B*40:06P	C
B	B*40:10P	WD
B	B*40:11P	WD
B	B*40:27P	C
B	B*41:02P	C
B	B*41:03P	C
B	B*42:01P	C
B	B*42:05P	WD
B	B*44:02P	C
B	B*44:03P	C
B	B*44:05P	C
B	B*45:01P	C
B	B*46:01P	C
B	B*47:01P	C
B	B*48:01P	C
B	B*48:02P	WD
B	B*48:03P	C
B	B*49:01P	C
B	B*50:01P	C
B	B*51:01P	C
B	B*51:02P	C
B	B*51:06P	C
B	B*51:07P	C
B	B*51:09P	C
B	B*51:13P	WD
B	B*52:01P	C
B	B*53:01P	C
B	B*54:01P	C
B	B*55:01P	C
B	B*55:02P	C
B	B*56:01P	C
B	B*57:01P	C
B	B*57:02P	C
B	B*57:03P	C
B	B*58:01P	C
B	B*59:01P	C
B	B*67:01P	C
B	B*78:01P	C
B	B*78:02P	WD
B	B*81:01P	C
C	C*01:02P	C
C	C*01:03P	WD
C	C*02:02P	C
C	C*03:02P	C
C	C*03:03P	C
C	C*03:04P	C
C	C*03:40P	WD
C	C*04:01P	C
C	C*04:04P	C

C	C*04:15P	WD
C	C*05:01P	C
C	C*05:09P	WD
C	C*06:02P	C
C	C*07:01P	C
C	C*07:02P	C
C	C*07:04P	C
C	C*07:27P	WD
C	C*07:56P	WD
C	C*08:01P	C
C	C*08:02P	C
C	C*08:03P	C
C	C*08:04P	C
C	C*12:02P	C
C	C*12:03P	C
C	C*12:04P	C
C	C*14:02P	C
C	C*15:02P	C
C	C*15:05P	C
C	C*15:06P	C
C	C*16:01P	C
C	C*16:02P	C
C	C*17:01P	C
C	C*18:01P	C
DRB1	DRB1*01:01P	C
DRB1	DRB1*01:02P	C
DRB1	DRB1*03:01P	C
DRB1	DRB1*03:02P	C
DRB1	DRB1*03:04P	WD
DRB1	DRB1*03:05P	WD
DRB1	DRB1*04:01P	C
DRB1	DRB1*04:02P	C
DRB1	DRB1*04:03P	C
DRB1	DRB1*04:04P	C
DRB1	DRB1*04:05P	C
DRB1	DRB1*04:06P	C
DRB1	DRB1*04:07P	C
DRB1	DRB1*04:08P	C
DRB1	DRB1*04:10P	C
DRB1	DRB1*04:11P	C
DRB1	DRB1*04:17P	C
DRB1	DRB1*07:01P	C
DRB1	DRB1*08:01P	C
DRB1	DRB1*08:02P	C
DRB1	DRB1*08:03P	C
DRB1	DRB1*08:04P	C
DRB1	DRB1*09:01P	C
DRB1	DRB1*10:01P	C
DRB1	DRB1*11:01P	C
DRB1	DRB1*11:02P	C
DRB1	DRB1*11:04P	C
DRB1	DRB1*11:06P	C
DRB1	DRB1*11:08P	WD

DRB1	DRB1*11:10P	C
DRB1	DRB1*11:11P	C
DRB1	DRB1*11:12P	C
DRB1	DRB1*11:13P	WD
DRB1	DRB1*11:14P	WD
DRB1	DRB1*11:19P	C
DRB1	DRB1*11:28P	WD
DRB1	DRB1*11:37P	WD
DRB1	DRB1*12:01P	C
DRB1	DRB1*12:02P	C
DRB1	DRB1*13:01P	C
DRB1	DRB1*13:02P	C
DRB1	DRB1*13:03P	C
DRB1	DRB1*13:05P	C
DRB1	DRB1*13:07P	C
DRB1	DRB1*13:11P	WD
DRB1	DRB1*13:12P	C
DRB1	DRB1*13:14P	C
DRB1	DRB1*13:26P	WD
DRB1	DRB1*14:01P	C
DRB1	DRB1*14:03P	C
DRB1	DRB1*14:05P	C
DRB1	DRB1*14:06P	C
DRB1	DRB1*14:07P	C
DRB1	DRB1*14:12P	WD
DRB1	DRB1*15:01P	C
DRB1	DRB1*15:02P	C
DRB1	DRB1*15:03P	C
DRB1	DRB1*15:06P	C
DRB1	DRB1*15:07P	WD
DRB1	DRB1*16:01P	C
DRB1	DRB1*16:02P	C
DRB1	DRB1*16:05P	WD
DRB3	DRB3*01:01P	C
DRB3	DRB3*02:01P	C
DRB3	DRB3*02:02P	C
DRB3	DRB3*03:01P	C
DRB4	DRB4*01:01P	C
DRB5	DRB5*01:01P	C
DRB5	DRB5*02:02P	C
DQA1	DQA1*01:01P	C
DQA1	DQA1*01:02P	C
DQA1	DQA1*01:03P	C
DQA1	DQA1*03:01P	C
DQA1	DQA1*04:01P	C
DQA1	DQA1*05:01P	C
DQA1	DQA1*06:01P	WD
DQB1	DQB1*02:01P	C
DQB1	DQB1*03:01P	C
DQB1	DQB1*03:02P	C
DQB1	DQB1*03:03P	C
DQB1	DQB1*03:05P	C
DQB1	DQB1*04:01P	C

DQB1	DQB1*04:02P	C
DQB1	DQB1*05:01P	C
DQB1	DQB1*05:02P	C
DQB1	DQB1*05:03P	C
DQB1	DQB1*06:01P	C
DQB1	DQB1*06:02P	C
DQB1	DQB1*06:03P	C
DQB1	DQB1*06:04P	C
DQB1	DQB1*06:05P	WD
DQB1	DQB1*06:08P	C
DQB1	DQB1*06:11P	WD
DPA1	DPA1*01:03P	C
DPA1	DPA1*02:01P	C
DPA1	DPA1*02:02P	C
DPB1	DPB1*01:01P	C
DPB1	DPB1*02:01P	C
DPB1	DPB1*03:01P	C
DPB1	DPB1*04:01P	C
DPB1	DPB1*04:02P	C
DPB1	DPB1*05:01P	C
DPB1	DPB1*11:01P	C
DPB1	DPB1*13:01P	C
DPB1	DPB1*17:01P	C
DPB1	DPB1*19:01P	C
DPB1	DPB1*20:01P	C
DPB1	DPB1*23:01P	C
DPB1	DPB1*26:01P	C
DPB1	DPB1*35:01P	C