



## Nomenclature for factors of the HLA system, update January, February and March 2019

Compiled by Steven G. E. Marsh for the WHO Nomenclature Committee for Factors of the HLA System\*

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The following sequences have been submitted to the Nomenclature Committee since the October, November, and December 2018 nomenclature update [1] and, following agreed policy, have been assigned official allele designations [2]. Full details of all sequences will be published in a forthcoming report.

Below are listed the newly assigned sequences (Table 1) and confirmations of previously reported sequences (Table 2). The accession number of each sequence is given and these can be used to retrieve the sequence files from the EMBL, GenBank or DDBJ data libraries. Although accession numbers have been assigned by the data-libraries and most sequences are already available, there is still the possibility that an author may not yet have allowed the sequence to be released; in such a case you will have to contact the submitting author directly. Additional information pertaining to new sequences is often included in the pub-

lications describing these alleles; a listing of recent publications that describe new HLA sequences is given in Table 3. In addition, the sequence for C\*02:02:05 was extended and shown to be a silent variant of C\*02:10:01:01, as a result, it has been renamed C\*02:10:06 and the name C\*02:02:05 has been abandoned. The alleles A\*02:795 and A\*01:281 were shown to have a non-synonymous change to their start codon which may affect protein expression, as a result, the Q suffix was added to their allele names.

All new and confirmatory sequences should now be submitted directly to the WHO Nomenclature Committee for Factors of the HLA System via the IPD-IMGT/HLA Database using the sequence submission tool provided [3]. The IPD-IMGT/HLA Database may be accessed via the World Wide Web at: [www.ebi.ac.uk/ipd/imgt/hla](http://www.ebi.ac.uk/ipd/imgt/hla)

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**Table 1**  
New Sequences.

HLA Allele	Cell identification	Accession number	Submitting author
A*01:298	HG00016442	MH215807	Histogenetics, Ossining, USA
A*01:299	HG00018120	MH802066	Histogenetics, Ossining, USA
A*01:300	HG00019094	MK143565	Histogenetics, Ossining, USA
A*01:301	HG00019137	MK143609	Histogenetics, Ossining, USA
A*01:302	TPH18-36-P, TPH18-36-F1	MK439949	Antonio Nieto, Cadiz, Spain
A*01:303	HG00016008	MH173492	Histogenetics, Ossining, USA
A*01:304	HG00016452	MH249126	Histogenetics, Ossining, USA
A*01:305	S20	MK618584	Johannes Weinberger, Vienna, Austria
A*02:01:162	NT02204	MK359164	Carolyn K Hurley, Washington DC, USA
A*02:42:02	HG00015927	MH049616	Histogenetics, Ossining, USA
A*02:826Q	HG00014805	MG805375, MH913431	Histogenetics, Ossining, USA
A*02:827Q	HG00016397	MH183123	Histogenetics, Ossining, USA
A*02:828	YFJY-A-8	MK350291	Yunli Zhou, Jinan, China
A*02:829	HG00017306	MH721245	Histogenetics, Ossining, USA
A*02:830	MDRI018	MK192105	Meetali Morjaria, Mumbai, India
A*02:831N	JMDP01K0179	LC459968	Masahiro Satake, Tokyo, Japan
A*02:832N	HG00015994	MH173478	Histogenetics, Ossining, USA
A*02:833N	HG00015968	MH173451	Histogenetics, Ossining, USA
A*02:834	HG00015977	MH173460	Histogenetics, Ossining, USA
A*02:835	HG00016679	MH347552	Histogenetics, Ossining, USA
A*02:836	HR-0976456	MK599294	Renata Zunec, Zagreb, Croatia
A*02:837	JXZJ20180304008	MK609344	Faming Zhu, Hangzhou, China
A*03:01:79	HG00018243	MH973889	Histogenetics, Ossining, USA
A*03:08:01:02	IMM002	MK578707	Marte Viken, Oslo, Norway
A*03:335N	HG00014749	MF422339	Histogenetics, Ossining, USA
A*03:336N	HG00015493	MG930547	Histogenetics, Ossining, USA
A*03:337N	HG00016644	MH294659	Histogenetics, Ossining, USA
A*03:338	HG00018189	MH924856	Histogenetics, Ossining, USA
A*03:339	HG00018232	MH973878	Histogenetics, Ossining, USA
A*03:340	HG00019083	MK143554	Histogenetics, Ossining, USA
A*03:341	HG00016710	MH347585	Histogenetics, Ossining, USA
A*03:342N	HG00016937	MH430785	Histogenetics, Ossining, USA
A*03:343	HG00017270	MH704658	Histogenetics, Ossining, USA
A*03:344	HG00018168	MH824598	Histogenetics, Ossining, USA
A*03:345	HG00019091	MK143562	Histogenetics, Ossining, USA
A*03:346	016378661	MK517526	Dominique Masson, La Tronche, France
A*03:347	DKMS-LSL-A-2358	LT986524	DKMS Life Sciences Lab, Dresden, Germany
A*03:348	DKMS-LSL-A-2377	LT986543	DKMS Life Sciences Lab, Dresden, Germany
A*03:349	HG00018195	MH924862	Histogenetics, Ossining, USA
A*03:350	4312842	MK521633	Jonathan Visentin, Bordeaux, France
A*11:01:87	HG00018192	MH924859	Histogenetics, Ossining, USA
A*11:01:88	HG00018219	MH973864	Histogenetics, Ossining, USA
A*11:01:89	5721800383	MK005883	Faming Zhu, Hangzhou, China
A*11:01:90	HG00019116	MK143587	Histogenetics, Ossining, USA
A*11:01:91	HG00019125	MK143596	Histogenetics, Ossining, USA
A*11:313Q	HG00015430	MG769727	Histogenetics, Ossining, USA
A*11:314	HG00017536	MH758806	Histogenetics, Ossining, USA
A*11:315	HG00018205	MH924872	Histogenetics, Ossining, USA
A*11:316	HG00018223	MH973868	Histogenetics, Ossining, USA
A*11:317	HG00018247	MH973894	Histogenetics, Ossining, USA
A*11:318	HG00018260	MH973908	Histogenetics, Ossining, USA
A*11:319	HG00018263	MH973912	Histogenetics, Ossining, USA
A*11:320	HG00018629	MK005589	Histogenetics, Ossining, USA
A*11:321	HG00018637	MK005598	Histogenetics, Ossining, USA
A*11:322	HG00019010	MK095470	Histogenetics, Ossining, USA
A*11:323	HG00019630	MK165902	Histogenetics, Ossining, USA
A*11:324	4284906	MK297297	Jonathan Visentin, Bordeaux, France
A*11:325	HG00014809	MG805379	Histogenetics, Ossining, USA
A*11:326	HG00018172	MH824602	Histogenetics, Ossining, USA
A*11:327	HG00018706	MH913434	Histogenetics, Ossining, USA
A*11:328	HG00019093	MK143564	Histogenetics, Ossining, USA
A*11:329	HG00019141	MK143613	Histogenetics, Ossining, USA
A*11:330	JMDP01K0173	LC460783	Masahiro Satake, Tokyo, Japan
A*11:331	HG00016013	MH173497	Histogenetics, Ossining, USA
A*11:332	4671500469	MK647995	Xin Li, Harbin, China
A*23:01:27	HG00018200	MH924867	Histogenetics, Ossining, USA
A*23:93	HG00018179	MH924846	Histogenetics, Ossining, USA
A*24:02:01:21	DKMS-LSL_ID15926250	LR136999	DKMS Life Sciences Lab, Dresden, Germany
A*24:02:102:02	HG00014397	MG756764	Histogenetics, Ossining, USA
A*24:02:116	HG00018170	MH824600	Histogenetics, Ossining, USA
A*24:02:117	HG00018244	MH973890	Histogenetics, Ossining, USA
A*24:02:118	HG00018264	MH973913	Histogenetics, Ossining, USA
A*24:02:119	HG00019004	MK032382	Histogenetics, Ossining, USA
A*24:02:120	HG00019111	MK143582	Histogenetics, Ossining, USA

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Table 1 (continued)

HLA Allele	Cell identification	Accession number	Submitting author
A*24:02:121	HG00019123	MK143594	Histogenetics, Ossining, USA
A*24:02:122	BST1363844	MK358138	Francesc Rudilla, Barcelona, Spain
A*24:14:01:04	60692198	MK560344	Antonio Balas, Madrid, Spain
A*24:434N	HG00016705	MH347578	Histogenetics, Ossining, USA
A*24:435N	HG00017300	MH721238	Histogenetics, Ossining, USA
A*24:436	HG00018178	MH924845	Histogenetics, Ossining, USA
A*24:437	HG00018193	MH924860	Histogenetics, Ossining, USA
A*24:438	HG00018221	MH973866	Histogenetics, Ossining, USA
A*24:439	HG00018640	MK005601	Histogenetics, Ossining, USA
A*24:440	HG00018643	MK005604	Histogenetics, Ossining, USA
A*24:441	HG00019009	MK095469	Histogenetics, Ossining, USA
A*24:442	HG00019084	MK143555	Histogenetics, Ossining, USA
A*24:443	HG00019113	MK143584	Histogenetics, Ossining, USA
A*24:444	HG00019627	MK165898	Histogenetics, Ossining, USA
A*24:445N	HG00016398, HG00016364, HG00016365	MH183124, MH183086, MH183087	Histogenetics, Ossining, USA
A*24:446	HG00016441	MH215806	Histogenetics, Ossining, USA
A*24:447	HG00018647	MK005608	Histogenetics, Ossining, USA
A*24:448N	HG00014784	MG769729	Histogenetics, Ossining, USA
A*24:449	4521600345	MK647998	Xin Li, Harbin, China
A*25:58	HG00018177	MH913435	Histogenetics, Ossining, USA
A*25:59	DKMS-LSL-A-2368	LT986534	DKMS Life Sciences Lab, Dresden, Germany
A*25:60	HG00016677	MH347550	Histogenetics, Ossining, USA
A*26:01:55	HG00018212	MH973857	Histogenetics, Ossining, USA
A*26:01:56	HG00018213	MH973858	Histogenetics, Ossining, USA
A*26:01:57	HG00018255, HG00018256, HG00018254	MH973903, MH973904, MH973902	Histogenetics, Ossining, USA
A*26:179	HG00019079	MK143550	Histogenetics, Ossining, USA
A*26:180N	061827	KP903400	Jianping Li, Shenyang, Liaoning, China
A*26:181	HG00018166	MH802070	Histogenetics, Ossining, USA
A*26:182	HG00019082	MK143553	Histogenetics, Ossining, USA
A*26:183	2018-2929	MK422099	Mauro Castagnetta, Genova, Italy
A*26:184	DKMS-LSL-A-2110	LT972149	DKMS Life Sciences Lab, Dresden, Germany
A*29:129	HG00019003	MK032378	Histogenetics, Ossining, USA
A*29:130	HG00019070	MK143541	Histogenetics, Ossining, USA
A*29:131	HG00019134	MK143605	Histogenetics, Ossining, USA
A*29:132	BST1308728	MK370903	Francesc Rudilla, Barcelona, Spain
A*30:01:01:03	NT02203	MK355716	Carolyn K Hurley, Washington DC, USA
A*30:02:22	HG00018164	MH802064	Histogenetics, Ossining, USA
A*30:02:23	HG00019106	MK143577	Histogenetics, Ossining, USA
A*30:02:24	HG00015956	MH173439	Histogenetics, Ossining, USA
A*30:146	HG00018240	MH973886	Histogenetics, Ossining, USA
A*30:147	HG00018634	MK005594	Histogenetics, Ossining, USA
A*30:148	HG00019077	MK143548	Histogenetics, Ossining, USA
A*30:149	HG00019108	MK143579	Histogenetics, Ossining, USA
A*30:150	HG00015856	MH049614	Histogenetics, Ossining, USA
A*30:151	HG00019121	MK143592	Histogenetics, Ossining, USA
A*30:152	DKMS-LSL-A-2369	LT986535	DKMS Life Sciences Lab, Dresden, Germany
A*30:153	HG00016428	MH215793	Histogenetics, Ossining, USA
A*31:01:34	5741701471	MK005885	Faming Zhu, Hangzhou, China
A*31:01:35	HG00019068	MK143539	Histogenetics, Ossining, USA
A*31:02:02	HG00019105	MK143576	Histogenetics, Ossining, USA
A*31:150	SZ-175	MK327518	Hong-Yan Zou, Shenzhen, China
A*31:151Q	HG00018203	MH924870	Histogenetics, Ossining, USA
A*31:152	HG00018632	MK005592	Histogenetics, Ossining, USA
A*31:153	HG00017551	MH758821	Histogenetics, Ossining, USA
A*32:01:34	HG00018218	MH973863	Histogenetics, Ossining, USA
A*32:01:35	HG00018242	MH973888	Histogenetics, Ossining, USA
A*32:122	HG00018191	MH924858	Histogenetics, Ossining, USA
A*32:123	HG00019008	MK095468	Histogenetics, Ossining, USA
A*32:124	HG00019620	MK165890	Histogenetics, Ossining, USA
A*32:125	HG00019626	MK165896	Histogenetics, Ossining, USA
A*32:126N	HG00019135	MK143607	Histogenetics, Ossining, USA
A*33:03:39	HG00018252, HG00018253	MH973900, MH973901	Histogenetics, Ossining, USA
A*33:03:40	HG00018645	MK005606	Histogenetics, Ossining, USA
A*33:171	HG00019138	MK143610	Histogenetics, Ossining, USA
A*33:172	V.E.C.	MK182707	Lisa Creary, Stanford, USA
A*33:173	18045732	MK391541	Daniel Fuerst, Ulm, Germany
A*33:174N	HG00014772	MG769713	Histogenetics, Ossining, USA
A*33:175Q	HG00016645	MH294660	Histogenetics, Ossining, USA
A*33:176N	HG00017304	MH721242	Histogenetics, Ossining, USA
A*33:177	HG00018176	MH913432	Histogenetics, Ossining, USA
A*33:178	HG00018628	MK005588	Histogenetics, Ossining, USA
A*33:179	HG00018648	MK005609	Histogenetics, Ossining, USA
A*33:180	HG00019006	MK095466	Histogenetics, Ossining, USA
A*33:181	HG00019071	MK143542	Histogenetics, Ossining, USA
A*33:182	HG00019623	MK165893	Histogenetics, Ossining, USA

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Table 1 (continued)

HLA Allele	Cell identification	Accession number	Submitting author
A*33:183	LSR76290	MK643128	Guilherme Damasio, Curitiba, Brazil
A*34:22	HG00019055	MH973909	Histogenetics, Ossining, USA
A*66:33	HG00014790	MG769736	Histogenetics, Ossining, USA
A*66:34	HG00018625	MK005585	Histogenetics, Ossining, USA
A*66:35	HG00016444	MH215809	Histogenetics, Ossining, USA
A*66:36	HG00015952	MH173435	Histogenetics, Ossining, USA
A*68:01:44	HG00018181	MH924848	Histogenetics, Ossining, USA
A*68:01:45	HG00018220	MH973865	Histogenetics, Ossining, USA
A*68:01:46	HG00018245	MH973891	Histogenetics, Ossining, USA
A*68:01:47	HG00019119	MK143590	Histogenetics, Ossining, USA
A*68:01:48	HG00019131	MK143602	Histogenetics, Ossining, USA
A*68:02:14	HG00019080	MK143551	Histogenetics, Ossining, USA
A*68:02:15	HG00017537	MH758807	Histogenetics, Ossining, USA
A*68:12:02	HG00018233	MH973879	Histogenetics, Ossining, USA
A*68:171:02N	HG00019005	MK095465	Histogenetics, Ossining, USA
A*68:206	HG00018238	MH973884	Histogenetics, Ossining, USA
A*68:207	HG00018239	MH973885	Histogenetics, Ossining, USA
A*68:208	HG00018249	MH973896	Histogenetics, Ossining, USA
A*68:209	HG00019066	MK143537	Histogenetics, Ossining, USA
A*68:210N	HG00014796	MG769742	Histogenetics, Ossining, USA
A*74:35	HG00019142	MK143614	Histogenetics, Ossining, USA
A*80:01:02	HG00015945	MH173428	Histogenetics, Ossining, USA
A*80:05	IVANOVA-180408002601	MK415664	Mehdi Alizadeh, Rennes, France
B*07:359	DKMS-LSL-B-2636	LS423067	DKMS Life Sciences Lab, Dresden, Germany
B*08:225	HG00017323	MH721254	Histogenetics, Ossining, USA
B*08:226	DKMS-LSL-B-3091	LS999239	DKMS Life Sciences Lab, Dresden, Germany
B*08:227	DKMS-LSL-B-3107	LS999256	DKMS Life Sciences Lab, Dresden, Germany
B*13:02:01:07	DKMS-LSL_ID15188653	LR137020	DKMS Life Sciences Lab, Dresden, Germany
B*13:131	DKMS-LSL-B-3142	LS999297	DKMS Life Sciences Lab, Dresden, Germany
B*15:10:01:02	DKMS-LSL_ID15716002	LR137028	DKMS Life Sciences Lab, Dresden, Germany
B*15:499	HG00018269	MH802077	Histogenetics, Ossining, USA
B*15:500	HG00018274	MH802085	Histogenetics, Ossining, USA
B*15:501	HG00018352	MH973955	Histogenetics, Ossining, USA
B*15:502	HG00018653	MK005617	Histogenetics, Ossining, USA
B*15:503	HG00019170	MK143643	Histogenetics, Ossining, USA
B*15:504	YFJY-B-9	MK350292	Yunli Zhou, Jinan, China
B*15:505	HG00014853	MG769774	Histogenetics, Ossining, USA
B*15:506	HG00014082, HG00014437, HG00015501	MG701502, MG756806, MG930555	Histogenetics, Ossining, USA
B*15:507	DKMS-LSL-B-2809	LS480852	DKMS Life Sciences Lab, Dresden, Germany
B*15:508	HG00017312	MH651442	Histogenetics, Ossining, USA
B*15:508	DKMS-LSL-B-3179	LS999340	DKMS Life Sciences Lab, Dresden, Germany
B*15:509	HG00017322	MH721253	Histogenetics, Ossining, USA
B*15:510	DKMS-LSL-B-3089	LS999237	DKMS Life Sciences Lab, Dresden, Germany
B*15:511	DKMS-LSL-B-3093	LS999241	DKMS Life Sciences Lab, Dresden, Germany
B*15:512	HG00018766	MK032329	Histogenetics, Ossining, USA
B*15:513	JMDP36K0233	LC456711	Masahiro Satake, Tokyo, Japan
B*15:514	O1600266	MK473370	Dominique Masson, La Tronche, France
B*15:515	HG00018342	MH973945	Histogenetics, Ossining, USA
B*15:516	DKMS-LSL-B-2251	LT968827	DKMS Life Sciences Lab, Dresden, Germany
B*15:517	DKMS-LSL-B-2544	LS398627	DKMS Life Sciences Lab, Dresden, Germany
B*15:518	DKMS-LSL-B-3103	LS999251	DKMS Life Sciences Lab, Dresden, Germany
B*15:519	DKMS-LSL-B-3140	LS999294	DKMS Life Sciences Lab, Dresden, Germany
B*15:520Q	DKMS-LSL-B-3180	LS999341	DKMS Life Sciences Lab, Dresden, Germany
B*18:01:01:20	DKMS-LSL_ID14636197	LR137003	DKMS Life Sciences Lab, Dresden, Germany
B*18:01:33	HG00015434	MG769754	Histogenetics, Ossining, USA
B*18:162	HG00018279	MH824586	Histogenetics, Ossining, USA
B*18:163	HG00015432	MG769751	Histogenetics, Ossining, USA
B*18:164	DKMS-LSL-B-2777	LS480820	DKMS Life Sciences Lab, Dresden, Germany
B*18:165	DKMS-LSL-B-2780	LS480823	DKMS Life Sciences Lab, Dresden, Germany
B*18:166	DKMS-LSL-B-3104	LS999252	DKMS Life Sciences Lab, Dresden, Germany
B*18:167	81195478	MK450289	Daniel Fuerst, Ulm, Germany
B*18:168	HG00015457	MF034411	Histogenetics, Ossining, USA
B*18:169	HR-5183812	MK599293	Renata Zunec, Zagreb, Croatia
B*27:05:02:11	DKMS-LSL-B-3072	LS999218	DKMS Life Sciences Lab, Dresden, Germany
B*27:05:38	0215029001	MK455073	Alison Gareau, Calgary, Canada
B*27:06:01:02	IVANOVA-17060772401	MK415659	Mehdi Alizadeh, Rennes, France
B*27:189	DKMS-LSL-B-3144	LS999299	DKMS Life Sciences Lab, Dresden, Germany
B*27:190	HG00018288	MH913436	Histogenetics, Ossining, USA
B*27:191	HG00018292	MH913440	Histogenetics, Ossining, USA
B*27:192	HG00019020	MK095474	Histogenetics, Ossining, USA
B*27:193	HG00019171	MK143644	Histogenetics, Ossining, USA
B*27:194	HG00019197	MK143670	Histogenetics, Ossining, USA
B*27:195	HG00015437	MG769758	Histogenetics, Ossining, USA
B*27:196	HG00016049	MH173363	Histogenetics, Ossining, USA
B*27:197	HG00018289, HG00018302, HG00018336	MH913437, MH924882, MH973939	Histogenetics, Ossining, USA

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Table 1 (continued)

HLA Allele	Cell identification	Accession number	Submitting author
B*35:01:01:19	DKMS-LSL_ID16033564	LR137033	DKMS Life Sciences Lab, Dresden, Germany
B*35:08:11	HG00018661	MK005625	Histogenetics, Ossining, USA
B*35:17:03	HG00019635	MK165861	Histogenetics, Ossining, USA
B*35:32:03	NT02212	MK611939	Carolyn K Hurley, Washington DC, USA
B*35:414	JRC-D36-098	LC440549	Masahiro Satake, Tokyo, Japan
B*35:415	HG00018282	MH824589	Histogenetics, Ossining, USA
B*35:415	HG00018663	MK005627	Histogenetics, Ossining, USA
B*35:416	HG00018317	MH924897	Histogenetics, Ossining, USA
B*35:417	HG00018326	MH973929	Histogenetics, Ossining, USA
B*35:418	HG00018388	MH973993	Histogenetics, Ossining, USA
B*35:419	HG00019012	MH924900	Histogenetics, Ossining, USA
B*35:420	HG00019159	MK143632	Histogenetics, Ossining, USA
B*35:421	HG00019178	MK143651	Histogenetics, Ossining, USA
B*35:422	HG00019201	MK143674	Histogenetics, Ossining, USA
B*35:423	HG00019632	MK058662	Histogenetics, Ossining, USA
B*35:424	HG00019646	MK165874	Histogenetics, Ossining, USA
B*35:425	NT02202	MH885329	Carolyn K Hurley, Washington DC, USA
B*35:426	JRC-D08-123	LC440548	Masahiro Satake, Tokyo, Japan
B*35:427N	HG00014444	MG756813	Histogenetics, Ossining, USA
B*35:428Q	HG00016400	MH183074	Histogenetics, Ossining, USA
B*35:429	HG00016461	MH215817	Histogenetics, Ossining, USA
B*35:430N	HG00016478	MH215834	Histogenetics, Ossining, USA
B*35:431	DKMS-LSL-B-2800	LS480843	DKMS Life Sciences Lab, Dresden, Germany
B*35:432	HG00017342	MH721274	Histogenetics, Ossining, USA
B*35:433	HG00018270	MH802078	Histogenetics, Ossining, USA
B*35:434	HG00018286	MH824594	Histogenetics, Ossining, USA
B*35:435	HG00018281	MH824588	Histogenetics, Ossining, USA
B*35:436	NT02210	MK388399	Carolyn K Hurley, Washington DC, USA
B*37:01:16	MDRI021	MK192108	Meetali Morjaria, Mumbai, India
B*37:81	HG00019631	MK058661	Histogenetics, Ossining, USA
B*37:82N	HG00014832	MF422351	Histogenetics, Ossining, USA
B*37:83	HG00016086	MH173402	Histogenetics, Ossining, USA
B*37:83	DKMS-LSL-B-3183,	LS999344,	DKMS Life Sciences Lab, Dresden, Germany
	DKMS-LSL-B-3182	LS999343	
B*37:84	DKMS-LSL-B-2530	LS398613	DKMS Life Sciences Lab, Dresden, Germany
B*37:85	HG00018287	MH824595	Histogenetics, Ossining, USA
B*37:86N	HG00014838	MG769748	Histogenetics, Ossining, USA
B*37:87	011832404500A	MK541905	Faisal Aloufi, Riyadh, Saudi Arabia
B*37:88	4531800065	MK648001	Xin Li, Harbin, China
B*38:01:01:03Q	DKMS-LSL-B-3141	LS999295	DKMS Life Sciences Lab, Dresden, Germany
B*38:83N	DKMS-LSL-B-2312	LT966117	DKMS Life Sciences Lab, Dresden, Germany
B*39:144	HG00019648	MK165878	Histogenetics, Ossining, USA
B*39:145	P18 9186831E	MK341697	Jonathan Downing, Perth, Australia
B*39:146N	HG00016721, HG00016943	MH294666, MH401243	Histogenetics, Ossining, USA
B*39:147N	HG00018652	MK005616	Histogenetics, Ossining, USA
B*39:148	HG00016063	MH173377	Histogenetics, Ossining, USA
B*39:148	DKMS-LSL-B-3102	LS999250	DKMS Life Sciences Lab, Dresden, Germany
B*39:149	HG00019172	MK143645	Histogenetics, Ossining, USA
B*39:150Q	HG00017588	MH758960	Histogenetics, Ossining, USA
B*40:01:02:10	DKMS-LSL_ID14601330	LR137001	DKMS Life Sciences Lab, Dresden, Germany
B*40:01:02:11	DKMS-LSL_ID15351733	LR137024	DKMS Life Sciences Lab, Dresden, Germany
B*40:01:61	HG00018337	MH973940	Histogenetics, Ossining, USA
B*40:01:62	HG00018340	MH973943	Histogenetics, Ossining, USA
B*40:06:19	DKMS-LSL-B-2531	LS398614	DKMS Life Sciences Lab, Dresden, Germany
B*40:06:20	HG00018376	MH973979	Histogenetics, Ossining, USA
B*40:12:02	DKMS-LSL-B-2253	LT966829	DKMS Life Sciences Lab, Dresden, Germany
B*40:64:02	HG00018271	MH802079	Histogenetics, Ossining, USA
B*40:225:02	DKMS-LSL-B-3172	LS999332	DKMS Life Sciences Lab, Dresden, Germany
B*40:415	HG00018356	MH973959	Histogenetics, Ossining, USA
B*40:416	HG00018362	MH973965	Histogenetics, Ossining, USA
B*40:417	HG00018363	MH973966	Histogenetics, Ossining, USA
B*40:418	HG00018373	MH973976	Histogenetics, Ossining, USA
B*40:419	HG00019155	MK143628	Histogenetics, Ossining, USA
B*40:420	DKMS-LSL-B-2545	LS398628	DKMS Life Sciences Lab, Dresden, Germany
B*40:421Q	DKMS-LSL-B-2567	LS398650	DKMS Life Sciences Lab, Dresden, Germany
B*40:422	DKMS-LSL-B-2606	LS423037	DKMS Life Sciences Lab, Dresden, Germany
B*40:423	DKMS-LSL-B-2801	LS480844	DKMS Life Sciences Lab, Dresden, Germany
B*40:424	HG00017320	MH721251	Histogenetics, Ossining, USA
B*40:425	HG00018334, HG00018341	MH973937, MH973944	Histogenetics, Ossining, USA
B*40:426N	HG00018351	MH973954	Histogenetics, Ossining, USA
B*40:427	HG00018370	MH973973	Histogenetics, Ossining, USA
B*40:428N	HG00018384	MH973987	Histogenetics, Ossining, USA
B*40:429	DKMS-LSL-B-2621	LS423052	DKMS Life Sciences Lab, Dresden, Germany
B*40:430	DKMS-LSL-B-3216	LS999382	DKMS Life Sciences Lab, Dresden, Germany
B*40:431	HG00019643	MK165869	Histogenetics, Ossining, USA

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Table 1 (continued)

HLA Allele	Cell identification	Accession number	Submitting author
B*41:57	HG00018327	MH973930	Histogenetics, Ossining, USA
B*41:58	HG00019015	MH973992	Histogenetics, Ossining, USA
B*41:59	HG00019016	MK058660	Histogenetics, Ossining, USA
B*41:60	DKMS-LSL-B-2752	LS480795	DKMS Life Sciences Lab, Dresden, Germany
B*41:61	HG00017346	MH721279	Histogenetics, Ossining, USA
B*42:26	HG00017565	MH758937	Histogenetics, Ossining, USA
B*44:02:59	HG00018358	MH973961	Histogenetics, Ossining, USA
B*44:03:01:17	DKMS-LSL_ID15503254	LR137025	DKMS Life Sciences Lab, Dresden, Germany
B*44:03:49	HG00019056	MK058665	Histogenetics, Ossining, USA
B*44:334N	G0724177269681B	MH909753	Colin Brown, London, United Kingdom
B*44:335	HG00018125	MH802073	Histogenetics, Ossining, USA
B*44:336	HG00018343	MH973946	Histogenetics, Ossining, USA
B*44:337	HG00019013	MH924901	Histogenetics, Ossining, USA
B*44:338	HG00019148	MK143621	Histogenetics, Ossining, USA
B*44:339	JRC-D78-162	LC439286	Masahiro Satake, Tokyo, Japan
B*44:340	HG00014867	MG805392	Histogenetics, Ossining, USA
B*44:341N	HG00017344	MH721276	Histogenetics, Ossining, USA
B*44:342	DKMS-LSL-B-3119	LS999271	DKMS Life Sciences Lab, Dresden, Germany
B*44:343	HG00018664	MK005630	Histogenetics, Ossining, USA
B*44:344	HG00019189	MK143662	Histogenetics, Ossining, USA
B*44:345N	SEV180917_5429742	MK411540	Oh-Joong Kwon, Seoul, South Korea
B*44:346	016611551	MK500895	Dominique Masson, La Tronche, France
B*44:437	HG00016050	MH173364	Histogenetics, Ossining, USA
B*45:01:01:03	DKMS-LSL_ID14731681	LR137006	DKMS Life Sciences Lab, Dresden, Germany
B*45:01:06	HG00018354	MH973957	Histogenetics, Ossining, USA
B*45:01:07	HG00018655	MK005619	Histogenetics, Ossining, USA
B*45:25	HG00019146	MK143619	Histogenetics, Ossining, USA
B*46:76	HG00019211	MK143686	Histogenetics, Ossining, USA
B*47:01:04	HG00019160	MK143633	Histogenetics, Ossining, USA
B*48:49	HG00019641	MK165867	Histogenetics, Ossining, USA
B*48:50	H8410	MF152710	Xiaojing Wang, Tianjin, China
B*49:01:14	HG00018758	MK032321	Histogenetics, Ossining, USA
B*49:60N	DKMS-LSL-B-2209	LT968786	DKMS Life Sciences Lab, Dresden, Germany
B*49:61	HG00014081	MG701501	Histogenetics, Ossining, USA
B*49:62	HG00013659	MG584032	Histogenetics, Ossining, USA
B*49:63	DKMS-LSL-B-2532	LS398615	DKMS Life Sciences Lab, Dresden, Germany
B*50:62	HG00018295	MH913447	Histogenetics, Ossining, USA
B*50:63	HG00019011	MH924899	Histogenetics, Ossining, USA
B*51:01:01:33	DKMS-LSL_ID16032611	LR137032	DKMS Life Sciences Lab, Dresden, Germany
B*51:01:71	HG00019637	MK165863	Histogenetics, Ossining, USA
B*51:01:72	TMO38300	MK560343	Antonio Balas, Madrid, Spain
B*51:08:04	HG00017567	MH758939	Histogenetics, Ossining, USA
B*51:268	HG00018291	MH913439	Histogenetics, Ossining, USA
B*51:269	HG00018308	MH924888	Histogenetics, Ossining, USA
B*51:270	HG00018365	MH973968	Histogenetics, Ossining, USA
B*51:271	HG00018380	MH973983	Histogenetics, Ossining, USA
B*51:272	HG00018391	MH973996	Histogenetics, Ossining, USA
B*51:273N	HG00016402	MH183076	Histogenetics, Ossining, USA
B*51:274	HG00017311	MH651441	Histogenetics, Ossining, USA
B*51:275	DKMS-LSL-B-3166	LS999325	DKMS Life Sciences Lab, Dresden, Germany
B*51:276	HG00018390	MH973995	Histogenetics, Ossining, USA
B*51:277	016354630	MK517527	Dominique Masson, La Tronche, France
B*51:278	016355334	MK517528	Dominique Masson, La Tronche, France
B*51:279	DKMS-LSL-B-2239	LT968815	DKMS Life Sciences Lab, Dresden, Germany
B*51:280	DKMS-LSL-B-2254	LT968830	DKMS Life Sciences Lab, Dresden, Germany
B*51:281	HG00016091	MH173407	Histogenetics, Ossining, USA
B*52:01:37	HG00019179	MK143652	Histogenetics, Ossining, USA
B*52:85	HG00018374	MH973977	Histogenetics, Ossining, USA
B*52:86	HG00019184	MK143657	Histogenetics, Ossining, USA
B*52:87	BST1301976	MK370902	Francesc Rudilla, Barcelona, Spain
B*52:88	HG00016771	MH347634	Histogenetics, Ossining, USA
B*53:01:21	HG00018361	MH973964	Histogenetics, Ossining, USA
B*53:43:02	LIGH110989	MH999903	Maria da Graca Bicalho, Curitiba, Brazil
B*53:54	HG00018377	MH973980	Histogenetics, Ossining, USA
B*53:55	HG00018778	MK032342	Histogenetics, Ossining, USA
B*53:56	HG00016032	MH173345	Histogenetics, Ossining, USA
B*54:39	KUMC181127_LHG	MK303386	Oh-Joong Kwon, Seoul, South Korea
B*55:01:01:03	DKMS-LSL-B-3216	LS999383	DKMS Life Sciences Lab, Dresden, Germany
B*55:01:17	HG00017570	MH758942	Histogenetics, Ossining, USA
B*55:01:18	IVANOVA-180300200001	MK415661	Mehdi Alizadeh, Rennes, France
B*55:98	HG00018657	MK005621	Histogenetics, Ossining, USA
B*55:99	HG00019175	MK143648	Histogenetics, Ossining, USA
B*55:100	DKMS-LSL-B-3188	LS999349	DKMS Life Sciences Lab, Dresden, Germany
B*55:101	DKMS-LSL-B-3200	LS999362	DKMS Life Sciences Lab, Dresden, Germany
B*55:102	HG00014426	MG756795	Histogenetics, Ossining, USA

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Table 1 (continued)

HLA Allele	Cell identification	Accession number	Submitting author
B*55:103	DKMS-LSL-B-3165	LS999324	DKMS Life Sciences Lab, Dresden, Germany
B*56:02:03	HG00018378	MH973981	Histogenetics, Ossining, USA
B*56:65	DKMS-LSL-B-2317	LT966122	DKMS Life Sciences Lab, Dresden, Germany
B*56:66	HG00019206	MK143679	Histogenetics, Ossining, USA
B*57:115	DKMS-LSL-B-2644	LS423075	DKMS Life Sciences Lab, Dresden, Germany
B*57:116	HG00018368	MH973971	Histogenetics, Ossining, USA
B*57:117	HG00018389	MH973994	Histogenetics, Ossining, USA
B*57:118	HG00014855	MG769776	Histogenetics, Ossining, USA
B*57:119	DKMS-LSL-B-3143	LS999298	DKMS Life Sciences Lab, Dresden, Germany
B*57:120	DKMS-LSL-B-3206	LS999369	DKMS Life Sciences Lab, Dresden, Germany
B*58:101	HG00018298	MH924878	Histogenetics, Ossining, USA
B*58:102	HG00018318	MH924898	Histogenetics, Ossining, USA
B*58:103	HG00018324	MH973927	Histogenetics, Ossining, USA
B*58:104	HG00018349, HG00018360	MH973952, MH973963	Histogenetics, Ossining, USA
B*58:105	HG00018379	MH973982	Histogenetics, Ossining, USA
B*58:106	HG00019154	MK143627	Histogenetics, Ossining, USA
B*58:107	NT02207	MK368743	Carolyn K Hurley, Washington DC, USA
B*58:108	HG00019153	MK143626	Histogenetics, Ossining, USA
C*01:177	HG00018392	MH802094	Histogenetics, Ossining, USA
C*02:02:02:21	DNA-28-NAT	MK524388	Mehdi Alizadeh, Rennes, France
C*02:10:06	P17 7991131T	MH818566	Jonathan Downing, Perth, Australia
C*02:167	DKMS-LSL-C-2444	LT990032	DKMS Life Sciences Lab, Dresden, Germany
C*02:168	HG00016156	MH173562	Histogenetics, Ossining, USA
C*02:169N	HG00018478	MH974024	Histogenetics, Ossining, USA
C*03:03:54	AB5044	LR130185	Edward KL Yang, Hualien, Taiwan
C*03:04:74	SZ-177	MK629722	Hong-Yan Zou, Shenzhen, China
C*03:461	DKMS-LSL-C-1945	LT966147	DKMS Life Sciences Lab, Dresden, Germany
C*03:462N	HG00014472, HG00014950	MG756846, MG805408	Histogenetics, Ossining, USA
C*03:463N	JRC-D44-143	LC439287	Masahiro Satake, Tokyo, Japan
C*03:464	DKMS-LSL-C-2012, DKMS-LSL-C-1991	LT966333, LT966193	DKMS Life Sciences Lab, Dresden, Germany
C*03:465	KNUH190108	MK524725	Oh-Joong Kwon, Seoul, South Korea
C*03:466	WHUH001	MK512361	Jianhua Chen, Wuhan, China
C*04:351:02	MDRI020	MK192107	Meetal Morjaria, Mumbai, India
C*04:360	DKMS-LSL-C-1779	LT970846	DKMS Life Sciences Lab, Dresden, Germany
C*04:361	HG00017388	MH721311	Histogenetics, Ossining, USA
C*04:362N	DKMS-LSL-C-3068	LS992455	DKMS Life Sciences Lab, Dresden, Germany
C*04:363	HG00018137	MH802095	Histogenetics, Ossining, USA
C*04:364N	HG00014903	MF422358	Histogenetics, Ossining, USA
C*04:365N	HG00014907	MF422366	Histogenetics, Ossining, USA
C*04:366	HG00016178	MH173585	Histogenetics, Ossining, USA
C*04:367	DKMS-LSL-C-2727	LS453259	DKMS Life Sciences Lab, Dresden, Germany
C*04:368	HG00017192	MH544322	Histogenetics, Ossining, USA
C*04:369N	HG00017363	MH704667	Histogenetics, Ossining, USA
C*04:370	HG00018545	MH974093	Histogenetics, Ossining, USA
C*04:371N	HG00018682	MK005658	Histogenetics, Ossining, USA
C*04:372	BST1363856	MK296408	Francesc Rudilla, Barcelona, Spain
C*04:373	NT02206	MK368742	Carolyn K Hurley, Washington DC, USA
C*04:374N	HG00018779	MH913461	Histogenetics, Ossining, USA
C*04:375	30605	MK480465	Kelly Ingram, Winston-Salem, USA
C*05:01:01:17	0117584	MK641846	Antonio Balas, Madrid, Spain
C*05:204	HG00018495	MH974042	Histogenetics, Ossining, USA
C*05:205	DKMS-LSL-C-1993, DKMS-LSL-C-1992, DKMS-LSL-C-3059	LT966195, LT966194, LS992445	DKMS Life Sciences Lab, Dresden, Germany
C*05:206	DKMS-LSL-C-1996, DKMS-LSL-C-1995	LT966198, LT966197	DKMS Life Sciences Lab, Dresden, Germany
C*05:207	HG00017014	MH374092	Histogenetics, Ossining, USA
C*05:208N	DKMS-LSL-C-2826, DKMS-LSL-C-2825	LS973968, LS973967	DKMS Life Sciences Lab, Dresden, Germany
C*05:209	HG00018521	MH974068	Histogenetics, Ossining, USA
C*05:210	HG00018687	MK005663	Histogenetics, Ossining, USA
C*05:211	HG00019026	MK095478	Histogenetics, Ossining, USA
C*05:212	HG00019249	MK143733	Histogenetics, Ossining, USA
C*05:213N	HG00019276	MK143760	Histogenetics, Ossining, USA
C*05:214	HG00015925	JN806400	Histogenetics, Ossining, USA
C*05:214	HG00017611	MH758983	Histogenetics, Ossining, USA
C*05:214	DKMS-LSL-C-2948	LS992330	DKMS Life Sciences Lab, Dresden, Germany
C*05:215	HG00018417	MH913457	Histogenetics, Ossining, USA
C*06:252	DKMS-LSL-C-2044	LT966365	DKMS Life Sciences Lab, Dresden, Germany
C*06:253	HG00018404	MH824613	Histogenetics, Ossining, USA
C*06:254	HG00018423	MH913465	Histogenetics, Ossining, USA
C*06:255	HG00018429	MH924917	Histogenetics, Ossining, USA
C*06:256	SPCT01	KY287236	Aida Turganbekova, Astana, Kazakhstan
C*06:257N	HG00016149	MH173555	Histogenetics, Ossining, USA
C*06:258	HG00016176	MH173583	Histogenetics, Ossining, USA

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Table 1 (continued)

HLA Allele	Cell identification	Accession number	Submitting author
C*06:259N	HG00016405	MH183062	Histogenetics, Ossining, USA
C*06:260	HG00019653	MK165849	Histogenetics, Ossining, USA
C*06:261	300067	MK159701	Kelly Ingram, Winston-Salem, USA
C*06:262	2018_2494	MK298037	Mauro Castagnetta, Genova, Italy
C*06:263N	HG00015370	KX619608	Histogenetics, Ossining, USA
C*07:01:01:29	DKMS-LSL-C-2072	LT966393	DKMS Life Sciences Lab, Dresden, Germany
C*07:01:78	HG00018537, HG00019274	MH974085, MK143758	Histogenetics, Ossining, USA
C*07:01:79	HG00018541, HG00018677	MH974089, MK005653	Histogenetics, Ossining, USA
C*07:01:80	HG00019248	MK143732	Histogenetics, Ossining, USA
C*07:02:01:37	DKMS-LSL-C-2677	LS453209	DKMS Life Sciences Lab, Dresden, Germany
C*07:02:01:38	DKMS-LSL_ID16278471	LR137054	DKMS Life Sciences Lab, Dresden, Germany
C*07:02:105	HG00018518	MH974065	Histogenetics, Ossining, USA
C*07:02:106	HG00019252	MK143736	Histogenetics, Ossining, USA
C*07:20:02	DKMS-LSL-C-2906	LS992287	DKMS Life Sciences Lab, Dresden, Germany
C*07:725	DKMS-LSL-C-1951	LT966153	DKMS Life Sciences Lab, Dresden, Germany
C*07:726N	DKMS-LSL-C-2053	LT966374	DKMS Life Sciences Lab, Dresden, Germany
C*07:727	HG00017614	MH758986	Histogenetics, Ossining, USA
C*07:728	HG00018135	MH802092	Histogenetics, Ossining, USA
C*07:729	HG00018402	MH824611	Histogenetics, Ossining, USA
C*07:730	HG00018407	MH824616	Histogenetics, Ossining, USA
C*07:731	HG00018419	MH913459	Histogenetics, Ossining, USA
C*07:732	HG00018439	MH924927	Histogenetics, Ossining, USA
C*07:733N	HG00018457	MH924945	Histogenetics, Ossining, USA
C*07:734	HG00018467	MH974013	Histogenetics, Ossining, USA
C*07:735	HG00018474	MH974020	Histogenetics, Ossining, USA
C*07:736	HG00018476	MH974022	Histogenetics, Ossining, USA
C*07:737	HG00018481	MH974027	Histogenetics, Ossining, USA
C*07:738	HG00018488	MH974034	Histogenetics, Ossining, USA
C*07:739	HG00018493	MH974039	Histogenetics, Ossining, USA
C*07:740	HG00018506	MH974053	Histogenetics, Ossining, USA
C*07:741	HG00016114	MH173520	Histogenetics, Ossining, USA
C*07:742	HG00012304	KX646332	Histogenetics, Ossining, USA
C*07:743N	HG00013901, HG00013892	MG724857, MG701529	Histogenetics, Ossining, USA
C*07:744	HG00014139	MG701551	Histogenetics, Ossining, USA
C*07:745N	HG00014159	MG701571	Histogenetics, Ossining, USA
C*07:746N	HG00014910	MG769782	Histogenetics, Ossining, USA
C*07:747N	HG00014921	MG769798	Histogenetics, Ossining, USA
C*07:748	HG00014940, HG00014945	MG769823, MG769828	Histogenetics, Ossining, USA
C*07:749N	HG00014904	MF422361	Histogenetics, Ossining, USA
C*07:750N	HG00014905	MF422362	Histogenetics, Ossining, USA
C*07:751N	DKMS-LSL-C-2696	LS453228	DKMS Life Sciences Lab, Dresden, Germany
C*07:752N	HG00016835, HG00016836, HG00016837	MH347701, MH347702, MH347703	Histogenetics, Ossining, USA
C*07:753N	DKMS-LSL-C-2829	LS973971	DKMS Life Sciences Lab, Dresden, Germany
C*07:754N	DKMS-LSL-C-2827	LS973969	DKMS Life Sciences Lab, Dresden, Germany
C*07:755	DKMS-LSL-C-2951, DKMS-LSL-C-3053	LS992333, LS992439	DKMS Life Sciences Lab, Dresden, Germany
C*07:756	DKMS-LSL-C-3013	LS992399	DKMS Life Sciences Lab, Dresden, Germany
C*07:757	DKMS-LSL-C-3027	LS992413	DKMS Life Sciences Lab, Dresden, Germany
C*07:758	HG00018400	MH824609	Histogenetics, Ossining, USA
C*07:759	HG00018505	MH974052	Histogenetics, Ossining, USA
C*07:760	HG00018533	MH974081	Histogenetics, Ossining, USA
C*07:761	HG00018549	MH974097	Histogenetics, Ossining, USA
C*07:762	HG00018675	MK005649	Histogenetics, Ossining, USA
C*07:763	HG00019024	MK095476	Histogenetics, Ossining, USA
C*07:764	HG00019025, HG00019273	MK095477, MK143757	Histogenetics, Ossining, USA
C*07:765	HG00019058	MK058645	Histogenetics, Ossining, USA
C*07:766	HG00019236	MK143719	Histogenetics, Ossining, USA
C*07:767	HG00019237	MK143720	Histogenetics, Ossining, USA
C*07:768	HG00019255	MK143739	Histogenetics, Ossining, USA
C*07:769	HG00019263	MK143747	Histogenetics, Ossining, USA
C*07:770N	HG00019268	MK143752	Histogenetics, Ossining, USA
C*07:771	HG00019282	MK143766	Histogenetics, Ossining, USA
C*07:772	HG00019283	MK143767	Histogenetics, Ossining, USA
C*07:773N	HG00019285	MK143769	Histogenetics, Ossining, USA
C*07:774	HG00019659	MK165856	Histogenetics, Ossining, USA
C*07:775	HG00015553	MG930608	Histogenetics, Ossining, USA
C*07:776N	HG00016131	MH173537	Histogenetics, Ossining, USA
C*07:777	HG00018670	MK005644	Histogenetics, Ossining, USA
C*07:778	18327020395	MK463864	Alison Gareau, Calgary, Canada
C*07:779	016585488	MK574681	Dominique Masson, La Tronche, France
C*08:01:27	HG00018673	MK005647	Histogenetics, Ossining, USA
C*08:01:28	HG00018680	MK005656	Histogenetics, Ossining, USA
C*08:02:24	HG00018538	MH974086	Histogenetics, Ossining, USA
C*08:02:25	HG00018558	MH974108	Histogenetics, Ossining, USA
C*08:02:26	HG00018873	MK058638	Histogenetics, Ossining, USA

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Table 1 (continued)

HLA Allele	Cell identification	Accession number	Submitting author
C*08:179	HG00018431	MH924919	Histogenetics, Ossining, USA
C*08:180N	DKMS-LSL-C-1999	LT966201	DKMS Life Sciences Lab, Dresden, Germany
C*08:181N	HG00014939	MG769822	Histogenetics, Ossining, USA
C*08:182	HG00014952	MG805410	Histogenetics, Ossining, USA
C*08:183	HG00017389	MH721312	Histogenetics, Ossining, USA
C*08:184	HG00018555	MH974103	Histogenetics, Ossining, USA
C*08:185	HG00018874	MK058639	Histogenetics, Ossining, USA
C*08:186	0108417	MK301450	Chun-Ying Lin, Taipei, Taiwan
C*08:187	H8395, H8396	MF152711	Xiaojing Wang, Tianjin, China
C*08:188	DKMS-LSL-C-2700	LS453232	DKMS Life Sciences Lab, Dresden, Germany
C*08:189	4511501560	MK647997	Xin Li, Harbin, China
C*12:02:26	HG00018489	MH974035	Histogenetics, Ossining, USA
C*12:02:27	HG00018681	MK005657	Histogenetics, Ossining, USA
C*12:02:28	HG00019022	MH974105	Histogenetics, Ossining, USA
C*12:02:29	JRC-D79-116	LC439288	Masahiro Satake, Tokyo, Japan
C*12:03:56	HG00018487	MH974033	Histogenetics, Ossining, USA
C*12:16:02	HG00016507	MH249138	Histogenetics, Ossining, USA
C*12:268	HG00018394	MH802103	Histogenetics, Ossining, USA
C*12:269	DKMS-LSL-C-2003	LT966205	DKMS Life Sciences Lab, Dresden, Germany
C*12:270N	HG00015557	MG930612	Histogenetics, Ossining, USA
C*12:271	HG00018133	MH802090	Histogenetics, Ossining, USA
C*12:272	HG00018393	MH802102	Histogenetics, Ossining, USA
C*12:273	HG00018482	MH974028	Histogenetics, Ossining, USA
C*12:274N	HG00018552	MH974100	Histogenetics, Ossining, USA
C*12:275	HG00018553	MH974101	Histogenetics, Ossining, USA
C*12:276	HG00019057	MH974104	Histogenetics, Ossining, USA
C*12:277	HG00019235	MK143718	Histogenetics, Ossining, USA
C*12:278	HG00019278	MK143762	Histogenetics, Ossining, USA
C*12:279	HG00019649	MK058641	Histogenetics, Ossining, USA
C*12:280	HG00019654	MK165850	Histogenetics, Ossining, USA
C*12:281	HG00019657	MK165854	Histogenetics, Ossining, USA
C*12:282	DKMS-LSL-C-2726	LS453258	DKMS Life Sciences Lab, Dresden, Germany
C*14:02:32	016331907	MK517529	Dominique Masson, La Tronche, France
C*14:03:02	HG00019616	MK095482	Histogenetics, Ossining, USA
C*14:47:02N	HG00018875	MK058640	Histogenetics, Ossining, USA
C*14:105Q	DKMS-LSL-C-1924	LT966281	DKMS Life Sciences Lab, Dresden, Germany
C*14:106	HG00016949	MH347714	Histogenetics, Ossining, USA
C*14:107	MDRI022	MK192109	Meetali Morjaria, Mumbai, India
C*14:108	DKMS-LSL-C-3037	LS992422	DKMS Life Sciences Lab, Dresden, Germany
C*14:109	2019_1169	MK551214	Mauro Castagnetta, Genova, Italy
C*15:02:01:09	DKMS-LSL-C-1990	LT966192	DKMS Life Sciences Lab, Dresden, Germany
C*15:02:41	DKMS-LSL-C-1905	LT966262	DKMS Life Sciences Lab, Dresden, Germany
C*15:02:42	HG00018520	MH974067	Histogenetics, Ossining, USA
C*15:05:01:03	DKMS-LSL_ID16283935	LR137059	DKMS Life Sciences Lab, Dresden, Germany
C*15:184	DKMS-LSL-C-1939,	LT966141,	DKMS Life Sciences Lab, Dresden, Germany
	DKMS-LSL-C-2995	LS992380	
C*15:185N	DKMS-LSL-C-2026	LT966347	DKMS Life Sciences Lab, Dresden, Germany
C*15:186	HG00018433	MH924921	Histogenetics, Ossining, USA
C*15:187	HG00018453	MH924941	Histogenetics, Ossining, USA
C*15:188N	HG00014490	MG756864	Histogenetics, Ossining, USA
C*15:189N	HG00016174	MH173581	Histogenetics, Ossining, USA
C*15:190	DKMS-LSL-C-3050	LS992435	DKMS Life Sciences Lab, Dresden, Germany
C*15:191	HG00018547	MH974095	Histogenetics, Ossining, USA
C*15:192	SZ-176	MK335474	Hong-Yan Zou, Shenzhen, China
C*15:193	0109871701	MK517415	Erik Rozemuller, Utrecht, The Netherlands
C*15:194	DKMS-LSL-C-2684	LS453216	DKMS Life Sciences Lab, Dresden, Germany
C*15:195	4521800458	MK648000	Xin Li, Harbin, China
C*16:02:17	P5785CT	MK105779	Vinicius Stelet, Rio de Janeiro, Brazil
C*16:147	HG00018440	MH924928	Histogenetics, Ossining, USA
C*16:148	HG00018468	MH974014	Histogenetics, Ossining, USA
C*16:149	HG00015877	MH049637	Histogenetics, Ossining, USA
C*16:150	DKMS-LSL-C-2749,	LS453281,	DKMS Life Sciences Lab, Dresden, Germany
	DKMS-LSL-C-2750	LS453282	
C*16:151	DKMS-LSL-C-2015	LT966336	DKMS Life Sciences Lab, Dresden, Germany
C*16:152	1119407	MK609957	Antonio Balas, Madrid, Spain
C*17:01:01:06	DKMS-LSL-C-1916	LT966273	DKMS Life Sciences Lab, Dresden, Germany
C*17:01:15	DKMS-LSL-C-3063	LS992449	DKMS Life Sciences Lab, Dresden, Germany
C*17:01:16	HG00016500	MH215856	Histogenetics, Ossining, USA
C*17:03:01:04	HG00014121, HG00014461	MG701527, MG756834	Histogenetics, Ossining, USA
C*17:03:03	HG00017608	MH758980	Histogenetics, Ossining, USA
C*17:42	DKMS-LSL-C-2969	LS992352	DKMS Life Sciences Lab, Dresden, Germany
C*17:43	HG00018134	MH802091	Histogenetics, Ossining, USA
C*17:44	HG00018444	MH924932	Histogenetics, Ossining, USA
C*17:45	HG00018464	MH924952	Histogenetics, Ossining, USA
C*17:46	HG00016501	MH215857	Histogenetics, Ossining, USA

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Table 1 (continued)

HLA Allele	Cell identification	Accession number	Submitting author
C*18:01:02	HG00018438	MH924926	Histogenetics, Ossining, USA
E*01:03:02:03	DNA-121	MK415679	Mehdi Alizadeh, Rennes, France
E*01:03:06	DNA-97	MK415684	Mehdi Alizadeh, Rennes, France
E*01:11	DNA-16	MK415672	Mehdi Alizadeh, Rennes, France
F*01:01:01:20	DNA-57	MK415674	Mehdi Alizadeh, Rennes, France
F*01:01:01:21	DNA-59	MK415675	Mehdi Alizadeh, Rennes, France
F*01:01:02:12	DNA-6	MK415670	Mehdi Alizadeh, Rennes, France
F*01:01:04	DNA-77-141-153	MK415678	Mehdi Alizadeh, Rennes, France
F*01:01:05	DNA-50-NAT	MK524392	Mehdi Alizadeh, Rennes, France
F*01:04:01:02	DNA-46	MK415681	Mehdi Alizadeh, Rennes, France
G*01:01:01:09	DNA-16	MK415673	Mehdi Alizadeh, Rennes, France
G*01:01:01:10	DNA-121	MK415680	Mehdi Alizadeh, Rennes, France
G*01:01:01:11	DNA-76-NAT	MK524397	Mehdi Alizadeh, Rennes, France
G*01:01:22:02	DNA-67	MK415676	Mehdi Alizadeh, Rennes, France
G*01:01:22:03	DNA-117	MK415683	Mehdi Alizadeh, Rennes, France
G*01:01:23	DNA-188	MK415682	Mehdi Alizadeh, Rennes, France
G*01:04:01:03	IVANOVA-17060772401	MK415660	Mehdi Alizadeh, Rennes, France
H*01:01:02	HG03061	MK387856	Julie di Cristofaro, Marseille, France
H*01:03	NA19143	MK387859	Julie di Cristofaro, Marseille, France
H*01:04	HG03457	MK387857	Julie di Cristofaro, Marseille, France
H*01:05	NA20587	MK387858	Julie di Cristofaro, Marseille, France
H*02:03:02	HG03894	MK387864	Julie di Cristofaro, Marseille, France
H*02:07	HG03673	MK387860	Julie di Cristofaro, Marseille, France
H*02:08	HG03419	MK387861	Julie di Cristofaro, Marseille, France
H*02:09	HG03057	MK387862	Julie di Cristofaro, Marseille, France
H*02:10	HG03078	MK387863	Julie di Cristofaro, Marseille, France
H*02:11	NA19118	MK387865	Julie di Cristofaro, Marseille, France
H*02:12	HG02851	MK387866	Julie di Cristofaro, Marseille, France
H*02:13	HG03548	MK387867	Julie di Cristofaro, Marseille, France
H*02:14	HG03838	MK387868	Julie di Cristofaro, Marseille, France
DRB1*01:100	4285926	MK297298	Jonathan Visentin, Bordeaux, France
DRB1*07:101N	93116520	MK391540	Daniel Fuerst, Ulm, Germany
DRB1*08:90	81193924	MK391543	Daniel Fuerst, Ulm, Germany
DRB1*12:02:09	HG00019514	MK143854	Histogenetics, Ossining, USA
DRB1*13:28:02	HG00019565	MK143913	Histogenetics, Ossining, USA
DRB1*13:277	HG00015226	MG805453	Histogenetics, Ossining, USA
DRB1*13:278Q	HG00013548	MG450976	Histogenetics, Ossining, USA
DRB1*13:279	93118289	MK501624	Daniel Fuerst, Ulm, Germany
DRB1*14:25:02	BTH172	LR135812	Edward KL Yang, Hualien, Taiwan
DRB1*14:208	HG00017132	MH536269	Histogenetics, Ossining, USA
DRB1*14:209	HG00019504	MK143843	Histogenetics, Ossining, USA
DRB1*14:210Q	HG00019573	MK143922	Histogenetics, Ossining, USA
DRB1*14:211	WON,I	MK205123	Lisa Creary, Stanford, USA
DRB1*15:01:39	HG00018954	MK058677	Histogenetics, Ossining, USA
DRB1*15:01:40	HG00019538	MK143881	Histogenetics, Ossining, USA
DRB1*15:01:41	HG00019548	MK143892	Histogenetics, Ossining, USA
DRB1*15:03:01:03	CC	LT963652	Steven GE Marsh, London, United Kingdom
DRB1*15:03:04	HG00019543	MK143886	Histogenetics, Ossining, USA
DRB1*15:06:04	HG00019571	MK143919	Histogenetics, Ossining, USA
DRB1*15:11:02	HG00015908	MH049646	Histogenetics, Ossining, USA
DRB1*15:31:02	HG00019569	MK143917	Histogenetics, Ossining, USA
DRB1*15:163N	HG00013796	MG584080	Histogenetics, Ossining, USA
DRB1*15:164Q	HG00017470	MH670739	Histogenetics, Ossining, USA
DRB1*15:165	HG00019502	MK143841	Histogenetics, Ossining, USA
DRB1*15:166	HG00019529	MK143872	Histogenetics, Ossining, USA
DRB1*15:167	HG00019567	MK143915	Histogenetics, Ossining, USA
DRB1*15:168	HG00019570	MK143918	Histogenetics, Ossining, USA
DRB1*15:169	HG00019583	MK143935	Histogenetics, Ossining, USA
DRB1*15:170	016599420	MK500899	Alexandre Dous, La Tronche, France
DRB1*16:01:16	HG00019474	MK143810	Histogenetics, Ossining, USA
DRB1*16:02:08	HG00019480	MK143817	Histogenetics, Ossining, USA
DRB1*16:54	HG00019492	MK143829	Histogenetics, Ossining, USA
DRB1*16:55N	HG00019518	MK143860	Histogenetics, Ossining, USA
DRB1*16:56	HG00019581	MK143933	Histogenetics, Ossining, USA
DRB3*01:01:02:03	MYE 2004	MK328511	Steven GE Marsh, London, United Kingdom
DRB3*01:01:09	HG00018609	MH824621	Histogenetics, Ossining, USA
DRB3*01:01:10	HG00019592	MK143786	Histogenetics, Ossining, USA
DRB3*01:57	HG00018090	MH758860	Histogenetics, Ossining, USA
DRB3*01:58	HG00019052	MK095502	Histogenetics, Ossining, USA
DRB3*01:59	HG00019595	MK143789	Histogenetics, Ossining, USA
DRB3*01:60	HG00019596	MK143790	Histogenetics, Ossining, USA
DRB3*01:61	HG00019597	MK143791	Histogenetics, Ossining, USA
DRB3*01:62	RSH	MK610122	Steven GE Marsh, London, United Kingdom
DRB3*02:02:01:04	JVM	MK610121	Steven GE Marsh, London, United Kingdom
DRB3*02:02:17	4242072	MK310273	Jonathan Visentin, Bordeaux, France

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Table 1 (continued)

HLA Allele	Cell identification	Accession number	Submitting author
DRB3*02:02:18	HG00019593	MK143787	Histogenetics, Ossining, USA
DRB3*02:02:19	HG00019601	MK143797	Histogenetics, Ossining, USA
DRB3*02:02:20	STF01222	MK297329	Lisa Creary, Stanford, USA
DRB3*02:02:21	84030434	MK532312	Daniel Fuerst, Ulm, Germany
DRB3*02:88	HG00011728	KU992561	Histogenetics, Ossining, USA
DRB3*02:89	HG00018082	MH758851	Histogenetics, Ossining, USA
DRB3*02:90	HG00018080	MH758849	Histogenetics, Ossining, USA
DRB3*02:91	HG00018607	MH824619	Histogenetics, Ossining, USA
DRB3*02:92	HG00019586	MK143780	Histogenetics, Ossining, USA
DRB3*02:93	HG00019708	MK165918	Histogenetics, Ossining, USA
DRB3*02:94	93118254	MK501622	Daniel Fuerst, Ulm, Germany
DRB3*02:95N	HG00018971	MK058620	Histogenetics, Ossining, USA
DRB3*03:01:01:02	KOSE	MK656859	Steven GE Marsh, London, United Kingdom
DRB3*03:22	HG00016898, HG00016985	MH347717, MH401237	Histogenetics, Ossining, USA
DRB3*03:22	HG00019051	MK058628	Histogenetics, Ossining, USA
DRB3*03:23	HG00017488	MH704675	Histogenetics, Ossining, USA
DRB3*03:24	HG00018162	MH802108	Histogenetics, Ossining, USA
DRB3*03:25	HG00019588	MK143782	Histogenetics, Ossining, USA
DRB4*01:01:03	HG00018101	MH758971	Histogenetics, Ossining, USA
DRB4*01:01:04	HG00018613	MH924961	Histogenetics, Ossining, USA
DRB4*01:01:05	HG00018611	MH924959	Histogenetics, Ossining, USA
DRB4*01:01:06	81196967	MK501623	Daniel Fuerst, Ulm, Germany
DRB4*01:03:01:09	DEU	MK610118	Steven GE Marsh, London, United Kingdom
DRB4*01:03:01:10	YAR	MK610119	Steven GE Marsh, London, United Kingdom
DRB4*01:03:01:11	BM14	MK610120	Steven GE Marsh, London, United Kingdom
DRB4*01:87	HG00018612	MH924960	Histogenetics, Ossining, USA
DRB4*01:88	HG00018989	MK058655	Histogenetics, Ossining, USA
DRB4*01:89	HG00018990	MK058656	Histogenetics, Ossining, USA
DRB4*01:90	HG00019610	MK143696	Histogenetics, Ossining, USA
DRB4*01:91	HG00019711	MK165952	Histogenetics, Ossining, USA
DRB4*01:92	HG00019712	MK165953	Histogenetics, Ossining, USA
DRB4*01:93	HG00019713	MK165954	Histogenetics, Ossining, USA
DRB5*01:01:04	93114861	MK501621	Daniel Fuerst, Ulm, Germany
DRB5*01:22:02	HG00018864	MK032433	Histogenetics, Ossining, USA
DRB5*01:52N	HG00016354	MH183050	Histogenetics, Ossining, USA
DRB5*01:53N	HG00016987, HG00016989	MH401246, MH401248	Histogenetics, Ossining, USA
DRB5*01:54	HG00018622	MH924971	Histogenetics, Ossining, USA
DRB5*01:55	HG00019717	MK165957	Histogenetics, Ossining, USA
DQA1*01:01:01:06	FH11	MK478061	Steven GE Marsh, London, United Kingdom
DQA1*01:01:04	AN63	MK392192	Steven GE Marsh, London, United Kingdom
DQA1*01:01:05	1910058659	MK571154	Jonathan Visentin, Bordeaux, France
DQA1*01:02:01:11	AN90	MK448289	Steven GE Marsh, London, United Kingdom
DQA1*01:02:01:12	EMJ	MK610123	Steven GE Marsh, London, United Kingdom
DQA1*01:02:02:03	AN29	MK392193	Steven GE Marsh, London, United Kingdom
DQA1*01:02:02:04	WJR076	MK501650	Steven GE Marsh, London, United Kingdom
DQA1*01:03:01:09	DAUDI, AN72, OMW	MK478060, MK478062, MK501648	Steven GE Marsh, London, United Kingdom
DQA1*01:22	4258255	MK310274	Jonathan Visentin, Bordeaux, France
DQA1*01:23	18222788	MK182095	Daniel Fuerst, Ulm, Germany
DQA1*01:24	AN86	MK448288	Steven GE Marsh, London, United Kingdom
DQA1*01:25	4286767	MK571153	Jonathan Visentin, Bordeaux, France
DQA1*01:26	LIT302-19	MK584562	Mariarosa Battarra, Roma, Italy
DQA1*03:03:01:06	CB	MK501644	Steven GE Marsh, London, United Kingdom
DQA1*03:03:01:07	KWO010 (KAPA)	MK501646	Steven GE Marsh, London, United Kingdom
DQA1*03:06	19203169	MK643129	Daniel Fuerst, Ulm, Germany
DQA1*03:07	LKT14	MK656860	Steven GE Marsh, London, United Kingdom
DQA1*04:01:01:05	AN53	MK328506	Steven GE Marsh, London, United Kingdom
DQA1*04:01:01:06	AN59	MK392195	Steven GE Marsh, London, United Kingdom
DQA1*04:01:01:07	SPACH	MK478063	Steven GE Marsh, London, United Kingdom
DQA1*04:01:01:08	DNA-76-NAT	MK524396	Mehdi Alizadeh, Rennes, France
DQA1*04:01:03	HG00019404	MK144010	Histogenetics, Ossining, USA
DQA1*05:01:01:04	AN72	MK501651	Steven GE Marsh, London, United Kingdom
DQA1*05:01:05	93114937	MK303345	Daniel Fuerst, Ulm, Germany
DQA1*05:01:06	30755	MK592891	Kelly Ingram, Winston-Salem, USA
DQA1*05:05:01:14	DRH001	MK328508	Steven GE Marsh, London, United Kingdom
DQA1*05:05:01:15	MOLT-4, BM16	MK392194, MK448290	Steven GE Marsh, London, United Kingdom
DQA1*05:05:01:16	HAG	MK392191	Steven GE Marsh, London, United Kingdom
DQA1*05:05:01:17	AN32	MK392189	Steven GE Marsh, London, United Kingdom
DQA1*05:05:01:18	AN33	MK392196	Steven GE Marsh, London, United Kingdom
DQA1*05:05:01:19	BM15	MK448291	Steven GE Marsh, London, United Kingdom
DQA1*05:05:01:20	DAN723	MK610124	Steven GE Marsh, London, United Kingdom
DQA1*05:15N	HG00015338	MG805505	Histogenetics, Ossining, USA
DQA1*06:01:01:03	LUY	MK501649	Steven GE Marsh, London, United Kingdom
DQA1*06:01:01:04	LIE	MK610125	Steven GE Marsh, London, United Kingdom
DQB1*02:141	L6371	LR131831	Vincent Elsermans, Lille cedex, France

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Table 1 (continued)

HLA Allele	Cell identification	Accession number	Submitting author
DQB1*02:142	HG00015130, HG00015133, HG00015109, HG00015639	MG805560, MG805563, MG769888, MG930709	Histogenetics, Ossining, USA
DQB1*03:02:01:07	DNA-33-NAT	MK524391	Mehdi Alizadeh, Rennes, France
DQB1*03:02:01:08	1910143999	MK644615	Jonathan Visentin, Bordeaux, France
DQB1*03:22:02	93117957, 93118470	MK501640, MK501625	Daniel Fuerst, Ulm, Germany
DQB1*03:38:02	HG00016557	MH215951	Histogenetics, Ossining, USA
DQB1*03:354N	HG00013544, HG00014297	MG451005, MG603213	Histogenetics, Ossining, USA
DQB1*03:355	HG00014310	MG603226	Histogenetics, Ossining, USA
DQB1*03:356N	HG00013249	MF442643	Histogenetics, Ossining, USA
DQB1*03:357N	HG00017210	MH544354	Histogenetics, Ossining, USA
DQB1*03:358N	HG00018578	MH824625	Histogenetics, Ossining, USA
DQB1*03:359	4511500689	MK647996	Xin Li, Harbin, China
DQB1*04:62	H9119, H9120	MF770516	Xiaojing Wang, Tianjin, China
DQB1*05:01:33	STF00943	MK297328	Lisa Creary, Stanford, USA
DQB1*05:01:34	016614151	MK500898	Dominique Masson, La Tronche, France
DQB1*05:02:01:05	HS67	LT976479	DKMS Life Sciences Lab, Dresden, Germany
DQB1*05:02:01:06	DNA-29-NAT	MK524390	Mehdi Alizadeh, Rennes, France
DQB1*05:200	HG00018934	MK058584	Histogenetics, Ossining, USA
DQB1*05:201	HG00019044	MK095489	Histogenetics, Ossining, USA
DQB1*05:202	HG00019409	MK143946	Histogenetics, Ossining, USA
DQB1*05:203	HG00019420	MK143959	Histogenetics, Ossining, USA
DQB1*05:204	HG00014283	MG584119	Histogenetics, Ossining, USA
DQB1*05:205	HG00014286	MG584122	Histogenetics, Ossining, USA
DQB1*05:206N	HG00014296	MG603212	Histogenetics, Ossining, USA
DQB1*05:207	HG00014314	MG701621	Histogenetics, Ossining, USA
DQB1*05:208N	HG00014554	MG756932	Histogenetics, Ossining, USA
DQB1*05:209	HG00015898	MH049681	Histogenetics, Ossining, USA
DQB1*05:210	HG00016564	MH215958	Histogenetics, Ossining, USA
DQB1*05:211	HG00017254	MH544360	Histogenetics, Ossining, USA
DQB1*05:212	HG00017459	MH721390	Histogenetics, Ossining, USA
DQB1*05:213	HG00017912	MH779193	Histogenetics, Ossining, USA
DQB1*05:214	HG00018834	MH974002	Histogenetics, Ossining, USA
DQB1*05:215N	HG00018925	MK058575	Histogenetics, Ossining, USA
DQB1*05:216	0163349482	MK500897	Dominique Masson, La Tronche, France
DQB1*05:217	D272780	LR215833	Edward KL Yang, Hualien, Taiwan
DQB1*06:01:20	HG00018572	MH802117	Histogenetics, Ossining, USA
DQB1*06:01:21	HG00018833	MH913485	Histogenetics, Ossining, USA
DQB1*06:02:02	HG00019048	MK095493	Histogenetics, Ossining, USA
DQB1*06:270:02	HG00017449	MH670752	Histogenetics, Ossining, USA
DQB1*06:303N	HG00014291	MG584127	Histogenetics, Ossining, USA
DQB1*06:304N	HG00014644, HG00014647, HG00015114, HG00017446	MG769880, MG769883, MG769893, MH670749	Histogenetics, Ossining, USA
DQB1*06:305	HG00015896	MH049679	Histogenetics, Ossining, USA
DQB1*06:306N	HG00016286	MH173651	Histogenetics, Ossining, USA
DQB1*06:307	HG00017457	MH721388	Histogenetics, Ossining, USA
DQB1*06:308N	HG00017868, HG00017915	MH758873, MH779196	Histogenetics, Ossining, USA
DQB1*06:309	HG00017908	MH779188	Histogenetics, Ossining, USA
DQB1*06:310	HG00017911	MH779191	Histogenetics, Ossining, USA
DQB1*06:311	HG00017975	MH779258	Histogenetics, Ossining, USA
DQB1*06:312	HG00018935	MK058585	Histogenetics, Ossining, USA
DQB1*06:313	HG00019042	MK095487	Histogenetics, Ossining, USA
DQB1*06:314	HG00019408	MK143945	Histogenetics, Ossining, USA
DQB1*06:315	HG00019431	MK143973	Histogenetics, Ossining, USA
DQB1*06:316	HG00019441	MK143983	Histogenetics, Ossining, USA
DQB1*06:317N	HG00019454	MK143997	Histogenetics, Ossining, USA
DQB1*06:318	HG00019698	MK165887	Histogenetics, Ossining, USA
DQB1*06:319	HG00014285, HG00014288	MG584121, MG584124	Histogenetics, Ossining, USA
DQB1*06:319	HG00017974	MH779257	Histogenetics, Ossining, USA
DQB1*06:320	HG00013594	MG451006	Histogenetics, Ossining, USA
DQB1*06:321	HG00016553	MH215947	Histogenetics, Ossining, USA
DQB1*06:322	HG00017452	MH670755	Histogenetics, Ossining, USA
DQB1*06:323	MDRI014	MK192110	Meetal Morjaria, Mumbai, India
DQB1*06:324	H8883	MK518069	Xiaojing Wang, Tianjin, China
DQB1*06:325	HG00018155	MH802114	Histogenetics, Ossining, USA
DQB1*06:326	016198816	MK574680	Dominique Masson, La Tronche, France
DPA1*01:03:01:20	PETCH	MK541690	Steven GE Marsh, London, United Kingdom
DPA1*01:03:01:21	JAP-NF	MK541693	Steven GE Marsh, London, United Kingdom
DPA1*01:03:01:22	M7	MK501647	Steven GE Marsh, London, United Kingdom
DPA1*01:03:01:23	KWO010 (KAPA)	MK610127	Steven GE Marsh, London, United Kingdom
DPA1*01:03:08	18224116	MK238489	Daniel Fuerst, Ulm, Germany
DPA1*01:03:09	18223631	MK214321	Daniel Fuerst, Ulm, Germany
DPA1*01:18	30456	MK480463	Kelly Ingram, Winston-Salem, USA
DPA1*01:19	30522	MK480464	Kelly Ingram, Winston-Salem, USA
DPA1*02:01:01:10	DNA-32-NAT	MK524386	Mehdi Alizadeh, Rennes, France
DPA1*02:01:01:11	LIE	MK610129	Steven GE Marsh, London, United Kingdom

(continued on next page)

Table 1 (continued)

HLA Allele	Cell identification	Accession number	Submitting author
<i>DPA1*02:13N</i>	30051	MK159702	Kelly Ingram, Winston-Salem, USA
<i>DPA1*02:14</i>	FH9	MK182705	Lisa Creary, Stanford, USA
<i>DPA1*02:15</i>	4281119	MK521635	Jonathan Visentin, Bordeaux, France
<i>DPA1*02:16</i>	30872	MK592889	Kelly Ingram, Winston-Salem, USA
<i>DPA1*03:01:01:02</i>	AMAI	MK478059	Steven GE Marsh, London, United Kingdom
<i>DPA1*03:01:01:03</i>	CC	MK541691	Steven GE Marsh, London, United Kingdom
<i>DPA1*03:01:01:04</i>	ELON	MK541692	Steven GE Marsh, London, United Kingdom
<i>DPA1*03:01:01:05</i>	RSH	MK656858	Steven GE Marsh, London, United Kingdom
<i>DPA1*03:04</i>	AN300205	MK211481	Steven GE Marsh, London, United Kingdom
<i>DPA1*04:01:01:02</i>	T7526	MK478064	Steven GE Marsh, London, United Kingdom
<i>DPA1*04:01:01:03</i>	LIE	MK610130	Steven GE Marsh, London, United Kingdom
<i>DPB1*02:01:42</i>	DKMS-LSL_ID15660317, DKMS-LSL_ID13169506	LR137084, LR137083	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*02:01:43</i>	HG00019677	MK165933	Histogenetics, Ossining, USA
<i>DPB1*03:01:11</i>	DKMS-LSL_ID15935057	LR137095	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*03:01:12</i>	DKMS-LSL_ID15661572, DKMS-LSL_ID14937951	LR137109, LR137107	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*04:01:01:34</i>	DKMS-LSL_ID14606314	LR137079	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*04:01:40</i>	DKMS-LSL_ID13184213	LR137114	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*04:02:01:14</i>	DKMS-LSL_ID14934077	LR137078	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*13:01:01:08</i>	DKMS-LSL_ID12209106	LR137077	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*15:01:03</i>	DKMS-LSL_ID15779364, DKMS-LSL_ID14828915	LR137106, LR137105	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*16:01:03</i>	DKMS-LSL_ID12941723	LR137094	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*55:01:01:04</i>	DKMS-LSL-DPB1-1689	LS480696	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*55:01:01:05</i>	DKMS-LSL-DPB1-1688	LS480695	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*104:01:02</i>	DKMS-LSL_ID15181710, DKMS-LSL_ID15181692	LR137072, LR137071	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*806:01:01:02</i>	DKMS-LSL_ID14481364	LR137076	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*879:01:01:03</i>	DKMS-LSL-DPB1-2875	LS990959	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*934:01Q</i>	HG00016534	MH215980	Histogenetics, Ossining, USA
<i>DPB1*935:01Q</i>	HG00017420, HG00017663	MH721365, MH758914	Histogenetics, Ossining, USA
<i>DPB1*936:01Q</i>	HG00017809	MH779397	Histogenetics, Ossining, USA
<i>DPB1*937:01</i>	HG00019385	MK144112	Histogenetics, Ossining, USA
<i>DPB1*938:01</i>	18225078	MK303346	Daniel Fuerst, Ulm, Germany
<i>DPB1*939:01N</i>	18222788	MK182096	Daniel Fuerst, Ulm, Germany
<i>DPB1*940:01</i>	HG00017198, HG00017432, HG00017734, HG00019398	MH544375, MH721378, MH779321, MK144128	Histogenetics, Ossining, USA
<i>DPB1*941:01N</i>	HG00016979	MH401266	Histogenetics, Ossining, USA
<i>DPB1*942:01</i>	HG00017681	MH779264	Histogenetics, Ossining, USA
<i>DPB1*943:01</i>	HG00018571	MH974007	Histogenetics, Ossining, USA
<i>DPB1*944:01</i>	HG00019390	MK144118	Histogenetics, Ossining, USA
<i>DPB1*945:01</i>	HG00019400	MK144130	Histogenetics, Ossining, USA
<i>DPB1*946:01</i>	DKMS-LSL_ID13189652, DKMS-LSL_ID13656633	LR137073, LR137074	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*947:01</i>	DKMS-LSL_ID13272222	LR137080	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*948:01</i>	DKMS-LSL_ID14709825	LR137081	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*949:01</i>	DKMS-LSL_ID14493624, DKMS-LSL_ID15656087	LR137085, LR137086	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*950:01N</i>	DKMS-LSL_ID15873596, DKMS-LSL_ID15611507	LR137088, LR137087	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*951:01</i>	DKMS-LSL_ID15170640, DKMS-LSL_ID15143384	LR137090, LR137089	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*952:01</i>	DKMS-LSL_ID14409549	LR137098	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*953:01</i>	DKMS-LSL_ID14864395, DKMS-LSL_ID14860430	LR137100, LR137099	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*954:01</i>	DKMS-LSL_ID11496217, DKMS-LSL_ID12128503	LR137101, LR137102	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*955:01</i>	DKMS-LSL_ID15631837, DKMS-LSL_ID15631838, DKMS-LSL_ID13798586	LR137103, LR137104, LR137068	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*956:01</i>	DKMS-LSL_ID13229295	LR137112	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*957:01</i>	DKMS-LSL_ID14334157	LR137115	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*958:01</i>	18225353	MK450290	Daniel Fuerst, Ulm, Germany
<i>DPB1*959:01N</i>	96098341	MK450291	Daniel Fuerst, Ulm, Germany
<i>DPB1*960:01N</i>	86030509	MK501626	Daniel Fuerst, Ulm, Germany
<i>DPB1*961:01</i>	HG00014235	MG603251	Histogenetics, Ossining, USA
<i>DPB1*962:01</i>	HG00014239	MG603255	Histogenetics, Ossining, USA
<i>DPB1*963:01</i>	HG00016531	MH215977	Histogenetics, Ossining, USA
<i>DPB1*964:01</i>	HG00017748	MH779335	Histogenetics, Ossining, USA
<i>DPB1*965:01:01:01</i>	DKMS-LSL-DPB1-2867	LS990951	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*965:01:01:02</i>	DKMS-LSL-DPB1-2868	LS990952	DKMS Life Sciences Lab, Dresden, Germany
<i>MICA*029:02</i>	WN522A	MK358122	Tian Wei, Urumqi, China
<i>MICA*088N</i>	WN535A	MK335966	Tian Wei, Urumqi, China

**Table 2**  
Confirmatory Sequences.

HLA Allele	Cell identification	Accession number	Submitting author
A*01:01:01:09	BY01661	MK279523	Carolyn K Hurley, Washington DC, USA
A*01:02	DKMS-LSL_ID15716002	LR136988	DKMS Life Sciences Lab, Dresden, Germany
A*01:03:01:02	DKMS-LSL_ID16283935	LR136997	DKMS Life Sciences Lab, Dresden, Germany
A*01:290N	HG00014752, HG00015455, HG00015456	MF422345, MF422343, MF422344	Histogenetics, Ossining, USA
A*02:01:157	HG00013305	MF170262	Histogenetics, Ossining, USA
A*02:04	DKMS-LSL_ID15589615	LR136989	DKMS Life Sciences Lab, Dresden, Germany
A*02:06:23	6866	MK305311	Maria Loginova, Kirov, Russia
A*02:17:02	DKMS-LSL_ID14695195	LR136990	DKMS Life Sciences Lab, Dresden, Germany
A*02:20:02	DKMS-LSL_ID16143764	LR136991	DKMS Life Sciences Lab, Dresden, Germany
A*02:60:01	BY01671, BY01672	MK442072	Carolyn K Hurley, Washington DC, USA
A*02:474	D384063	LR216286	Edward KL Yang, Hualien, Taiwan
A*02:672Q	434100	LR135811	Edward KL Yang, Hualien, Taiwan
A*02:744	MDRI015	MK192102	Meetali Morjarria, Mumbai, India
A*03:01:01:07	BY01677	MK442077	Carolyn K Hurley, Washington DC, USA
A*11:01:01:07	AN01078	LR027026	Steven GE Marsh, London, United Kingdom
A*24:03:01:02	DKMS-LSL_ID16183778	LR136998	DKMS Life Sciences Lab, Dresden, Germany
A*24:14:01:02	BY01639	MK203047	Carolyn K Hurley, Washington DC, USA
A*24:72	DNA-02-NAT	MK524384	Mehdi Alizadeh, Rennes, France
A*26:01:57	HG00013281, HG00013282	MF170269, MF170270	Histogenetics, Ossining, USA
A*26:01:57	HG00016997	MH477539	Histogenetics, Ossining, USA
A*26:08:01	BY01531	MG905187	Carolyn K Hurley, Washington DC, USA
A*29:10:01	DKMS-LSL_ID15153559	LR136992	DKMS Life Sciences Lab, Dresden, Germany
A*29:126Q	HG00013627	MG584018	Histogenetics, Ossining, USA
A*30:02:01:02	DKMS-LSL_ID14950010	LR137000	DKMS Life Sciences Lab, Dresden, Germany
A*30:02:01:02	BY01674, BY01675	MK442075	Carolyn K Hurley, Washington DC, USA
A*31:02:01	BY01645	MK203048	Carolyn K Hurley, Washington DC, USA
A*32:01:33	HG00012035	KU350639	Histogenetics, Ossining, USA
A*32:111	IVANOVA-180304248501	MK415662	Mehdi Alizadeh, Rennes, France
A*34:02:01:01	DKMS-LSL_ID16227712	LR136993	DKMS Life Sciences Lab, Dresden, Germany
A*36:01	DKMS-LSL_ID16158842	LR136994	DKMS Life Sciences Lab, Dresden, Germany
A*66:31	DKMS-LSL_ID15592775	LR136995	DKMS Life Sciences Lab, Dresden, Germany
A*68:01:41	G052517739483N	MK058299	Colin Brown, London, United Kingdom
A*68:92	92760	MK491626	Francisco de Paula Sanchez Gordo, Malaga, Spain
A*74:01:01:01	DKMS-LSL_ID15532586	LR136996	DKMS Life Sciences Lab, Dresden, Germany
B*08:01:37	81171212	MG586090	Daniel Fuerst, Ulm, Germany
B*08:01:47	HG00013322	MF170507	Histogenetics, Ossining, USA
B*08:18	AN00107	LT575544	Steven GE Marsh, London, United Kingdom
B*14:01:01:01	DKMS-LSL_ID15037015	LR137014	DKMS Life Sciences Lab, Dresden, Germany
B*15:01:01:06	DKMS-LSL_ID14695195	LR137004	DKMS Life Sciences Lab, Dresden, Germany
B*15:01:01:16	AN01047	LR027037	Steven GE Marsh, London, United Kingdom
B*15:03:01:02	DKMS-LSL_ID14967394	LR137011	DKMS Life Sciences Lab, Dresden, Germany
B*15:10:01:01	DKMS-LSL_ID16124371	LR137037	DKMS Life Sciences Lab, Dresden, Germany
B*15:16:01:02	DKMS-LSL_ID16158842	LR137038	DKMS Life Sciences Lab, Dresden, Germany
B*15:16:01:02	BY01674, BY01676	MK442076	Carolyn K Hurley, Washington DC, USA
B*15:17:01:01	DKMS-LSL_ID15054405	LR137016	DKMS Life Sciences Lab, Dresden, Germany
B*15:35	DKMS-LSL_ID16260625	LR137042	DKMS Life Sciences Lab, Dresden, Germany
B*15:73	NT02213	MK611940	Carolyn K Hurley, Washington DC, USA
B*27:02:01:04	DKMS-LSL_ID15223785	LR137021	DKMS Life Sciences Lab, Dresden, Germany
B*27:03	BY01678	MK442078	Carolyn K Hurley, Washington DC, USA
B*27:05:02:09	DKMS-LSL_ID14843238	LR137009	DKMS Life Sciences Lab, Dresden, Germany
B*35:01:01:02	DKMS-LSL_ID15092431	LR137018	DKMS Life Sciences Lab, Dresden, Germany
B*35:01:01:05	DKMS-LSL_ID15019277	LR137012	DKMS Life Sciences Lab, Dresden, Germany
B*35:02:01:02	DKMS-LSL_ID14940759	LR137010	DKMS Life Sciences Lab, Dresden, Germany
B*35:04:01	DKMS-LSL_ID16183778	LR137040	DKMS Life Sciences Lab, Dresden, Germany
B*35:84	AN00155	LT575639	Steven GE Marsh, London, United Kingdom
B*35:337:02	HG00018272	MH802083	Histogenetics, Ossining, USA
B*37:05	JRC-D31-107	LC440550	Masahiro Satake, Tokyo, Japan
B*37:42N	NT02211	MK388400	Carolyn K Hurley, Washington DC, USA
B*40:02:01:08	DKMS-LSL_ID16308036	LR137044	DKMS Life Sciences Lab, Dresden, Germany
B*40:27:01	BY01618, BY01640, BY01658	MK208890	Carolyn K Hurley, Washington DC, USA
B*40:221	D378083	LR130219	Edward KL Yang, Hualien, Taiwan
B*40:425	HG00014439	MG756808	Histogenetics, Ossining, USA
B*41:01:01:01	DKMS-LSL_ID15080550	LR137017	DKMS Life Sciences Lab, Dresden, Germany
B*41:02:01:01	DKMS-LSL_ID15592775	LR137026	DKMS Life Sciences Lab, Dresden, Germany
B*41:60	DKMS-LSL-B-2523	LS398606	DKMS Life Sciences Lab, Dresden, Germany
B*42:02:01:02	DKMS-LSL_ID16077206	LR137034	DKMS Life Sciences Lab, Dresden, Germany
B*44:02:58	HG00011411	KU725856	Histogenetics, Ossining, USA
B*44:03:01:13	AN01054	LR027055	Steven GE Marsh, London, United Kingdom
B*44:03:02	DKMS-LSL_ID16077206	LR137035	DKMS Life Sciences Lab, Dresden, Germany
B*44:05:01	DKMS-LSL_ID15286810	LR137022	DKMS Life Sciences Lab, Dresden, Germany
B*44:07	BY01679	MK442079	Carolyn K Hurley, Washington DC, USA
B*48:43	JXZJ20180526005	MK558024	Faming Zhu, Hangzhou, China
B*49:01:01:04	DKMS-LSL_ID15037015	LR137015	DKMS Life Sciences Lab, Dresden, Germany
B*50:02	DKMS-LSL_ID15619054	LR137061	DKMS Life Sciences Lab, Dresden, Germany

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Table 2 (continued)

HLA Allele	Cell identification	Accession number	Submitting author
B*51:01:01:04	DKMS-LSL_ID16098032	LR137036	DKMS Life Sciences Lab, Dresden, Germany
B*51:01:01:07	DKMS-LSL_ID15122611	LR137019	DKMS Life Sciences Lab, Dresden, Germany
B*51:01:01:09	DKMS-LSL_ID15834602	LR137029	DKMS Life Sciences Lab, Dresden, Germany
B*51:07:01	DKMS-LSL_ID15681384	LR137027	DKMS Life Sciences Lab, Dresden, Germany
B*51:08:01:01	DKMS-LSL_ID14741019	LR137007	DKMS Life Sciences Lab, Dresden, Germany
B*51:148	BY01680	MK442080	Carolyn K Hurley, Washington DC, USA
B*51:244	DKMS-LSL-B-2564, DKMS-LSL-B-2757	LS398647, LS480800	DKMS Life Sciences Lab, Dresden, Germany
B*52:01:01:01	DKMS-LSL_ID16013161	LR137031	DKMS Life Sciences Lab, Dresden, Germany
B*52:01:01:02	DKMS-LSL_ID14709673	LR137005	DKMS Life Sciences Lab, Dresden, Germany
B*52:01:05	JRC-D79-003	LC440553	Masahiro Satake, Tokyo, Japan
B*53:01:01:01	DKMS-LSL_ID16158842	LR137039	DKMS Life Sciences Lab, Dresden, Germany
B*54:01:01	DKMS-LSL_ID14601330	LR137002	DKMS Life Sciences Lab, Dresden, Germany
B*55:02:01:02	DKMS-LSL_ID15294239	LR137023	DKMS Life Sciences Lab, Dresden, Germany
B*56:01:01:04	DKMS-LSL-B-3095	LS999242	DKMS Life Sciences Lab, Dresden, Germany
B*56:01:01:04	DKMS-LSL_ID15033614	LR137013	DKMS Life Sciences Lab, Dresden, Germany
B*56:01:01:04	DKMS-LSL-B-3094	LS999216	DKMS Life Sciences Lab, Dresden, Germany
B*56:01:01:07	DKMS-LSL-B-3184	LS999345	DKMS Life Sciences Lab, Dresden, Germany
B*57:02:01	DKMS-LSL_ID14783385	LR137008	DKMS Life Sciences Lab, Dresden, Germany
B*57:08	AN00106	LT575543	Steven GE Marsh, London, United Kingdom
B*58:01:30	HG00010250	KR105359	Histogenetics, Ossining, USA
B*58:101	HG00019158	MK143631	Histogenetics, Ossining, USA
B*58:103	HG00013874	MG701484	Histogenetics, Ossining, USA
B*73:01	DKMS-LSL_ID16283935	LR137043	DKMS Life Sciences Lab, Dresden, Germany
B*81:01:01	DKMS-LSL_ID16183778	LR137041	DKMS Life Sciences Lab, Dresden, Germany
C*01:02:52	HG00012102	KX266781	Histogenetics, Ossining, USA
C*02:05:02	BY01687	MK442085	Carolyn K Hurley, Washington DC, USA
C*02:10:01:01	DKMS-LSL_ID14967394	LR137050	DKMS Life Sciences Lab, Dresden, Germany
C*02:10:01:01	BY01681, BY01682	MK442081	Carolyn K Hurley, Washington DC, USA
C*02:29	AN00112	LT575547	Steven GE Marsh, London, United Kingdom
C*02:84	DNA-27-NAT	MK524385	Mehdi Alizadeh, Rennes, France
C*02:145	016600266	MK500896	Dominique Masson, La Tronche, France
C*03:04:01:13	DKMS-LSL_ID14950010	LR137051	DKMS Life Sciences Lab, Dresden, Germany
C*03:04:02	DKMS-LSL_ID14783385	LR137045	DKMS Life Sciences Lab, Dresden, Germany
C*03:05	DKMS-LSL_ID14695195	LR137046	DKMS Life Sciences Lab, Dresden, Germany
C*03:115:02	DKMS-LSL-C-2024	LT966345	DKMS Life Sciences Lab, Dresden, Germany
C*03:383	016352823	MK574701	Dominique Masson, La Tronche, France
C*03:421N	HG00018669	MK005643	Histogenetics, Ossining, USA
C*04:01:01:06	DKMS-LSL_ID14940759	LR137052	DKMS Life Sciences Lab, Dresden, Germany
C*04:01:04	HG00015748	GQ240398	Histogenetics, Ossining, USA
C*04:01:80	HG00010368	KR607444	Histogenetics, Ossining, USA
C*04:01:89	HG00010371	KR818726	Histogenetics, Ossining, USA
C*04:04:01:01	DKMS-LSL_ID15148348	LR137053	DKMS Life Sciences Lab, Dresden, Germany
C*04:55	JRC-D43-002	LC440551	Masahiro Satake, Tokyo, Japan
C*04:290	HG00010280	KR153554	Histogenetics, Ossining, USA
C*04:332	HG00019028	MK095480	Histogenetics, Ossining, USA
C*04:336	HG00015459	MF034417	Histogenetics, Ossining, USA
C*05:01:45	HG00019269	MK143753	Histogenetics, Ossining, USA
C*05:199	HG00016110	MH173516	Histogenetics, Ossining, USA
C*05:205	DKMS-LSL-C-2695	LS453227	DKMS Life Sciences Lab, Dresden, Germany
C*07:01:02	BY01683, BY01678	MK442082	Carolyn K Hurley, Washington DC, USA
C*07:18:01:01	DKMS-LSL_ID16006007	LR137047	DKMS Life Sciences Lab, Dresden, Germany
C*07:38:01	AN00103	LT575541	Steven GE Marsh, London, United Kingdom
C*07:160	R51704	LR536309	Edward KL Yang, Hualien, Taiwan
C*07:287	AN00102	LT575540	Steven GE Marsh, London, United Kingdom
C*07:419	AN00178	LT596627	Steven GE Marsh, London, United Kingdom
C*07:595	D434760	LR215232	Edward KL Yang, Hualien, Taiwan
C*07:639	LIT1692-18	MK330843	Mariarosa Battarra, Roma, Italy
C*07:687	AN01088	LR027056	Steven GE Marsh, London, United Kingdom
C*07:704	MDRI017	MK192104	Meetali Morjaria, Mumbai, India
C*07:723	90259305	MK391542	Daniel Fuerst, Ulm, Germany
C*07:726N	DKMS-LSL-C-3028	LS992414	DKMS Life Sciences Lab, Dresden, Germany
C*07:737	HG00019247	MK143731	Histogenetics, Ossining, USA
C*08:01:25	SZ-178	MK641803	Hong-Yan Zou, Shenzhen, China
C*08:02:01:02	DKMS-LSL_ID15037015	LR137055	DKMS Life Sciences Lab, Dresden, Germany
C*08:02:23	HG00012118	KX425983	Histogenetics, Ossining, USA
C*08:04:01	DKMS-LSL_ID16183778	LR137048	DKMS Life Sciences Lab, Dresden, Germany
C*08:04:01	BY01673, BY01684	MK442074	Carolyn K Hurley, Washington DC, USA
C*08:178	HG00018671	MK005645	Histogenetics, Ossining, USA
C*12:03:01:02	BY01685	MK442083	Carolyn K Hurley, Washington DC, USA
C*12:09	AN00105	LT575613	Steven GE Marsh, London, United Kingdom
C*12:195:02	93420	MK491628	Francisco de Paula Sanchez Gordo, Malaga, Spain
C*12:261	MDRI016	MK192103	Meetali Morjaria, Mumbai, India
C*14:02:01:02	DKMS-LSL_ID16158842	LR137056	DKMS Life Sciences Lab, Dresden, Germany
C*14:03:01	BY01686	MK442084	Carolyn K Hurley, Washington DC, USA
C*14:51	BTH-153	LR215835	Edward KL Yang, Hualien, Taiwan

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Table 2 (continued)

HLA Allele	Cell identification	Accession number	Submitting author
C*14:102	HIN,JP, HIN,S	MK182704	Lisa Creary, Stanford, USA
C*15:02:36	HG00010073	KP792229	Histogenetics, Ossining, USA
C*15:06:01	DKMS-LSL_ID15122611	LR137049	DKMS Life Sciences Lab, Dresden, Germany
C*15:12	JRC-D78-006	LC440552	Masahiro Satake, Tokyo, Japan
C*17:01:01:05	DKMS-LSL_ID15130145	LR137057	DKMS Life Sciences Lab, Dresden, Germany
C*17:03:01:01	DKMS-LSL_ID15592775	LR137058	DKMS Life Sciences Lab, Dresden, Germany
C*17:38	DKMS-LSL_ID15624498	LR137060	DKMS Life Sciences Lab, Dresden, Germany
DRB1*04:01:10	R51788	LR56308	Edward KL Yang, Hualien, Taiwan
DRB1*04:90	D208321	LR216640	Edward KL Yang, Hualien, Taiwan
DRB1*07:101N	HG00015381, HG00015382	KX694126, KX694130	Histogenetics, Ossining, USA
DRB1*07:101N	HG00017221	MH544399	Histogenetics, Ossining, USA
DRB1*10:01:11	HG00013166	MF142113	Histogenetics, Ossining, USA
DRB1*14:19	MDRI019	MK192106	Meetal Morjaria, Mumbai, India
DRB3*02:02:12	HG00019618	MK143796	Histogenetics, Ossining, USA
DRB3*02:02:14	DNA-28-NAT	MK524389	Mehdi Alizadeh, Rennes, France
DRB4*01:01:01:01	MOLT-4	MK448287	Steven GE Marsh, London, United Kingdom
DRB4*01:01:04	PN39817732AN	LT626078	Steven GE Marsh, London, United Kingdom
DRB4*01:03:02	LKT14	MK501757	Steven GE Marsh, London, United Kingdom
DRB4*01:85	90P223809	MK391544	Daniel Fuerst, Ulm, Germany
DRB5*01:10N	CNS-11277466	MK377353	Jeremy Sherrill, Ann Arbor, USA
DQA1*01:22	4306449	MK310274	Jonathan Visentin, Bordeaux, France
DQB1*02:132N	HG00014295	MG603211	Histogenetics, Ossining, USA
DQB1*02:134N	HG00015378	KX619609	Histogenetics, Ossining, USA
DQB1*03:13	D426269	LR205988	Edward KL Yang, Hualien, Taiwan
DQB1*03:333	96096533	MK391545	Daniel Fuerst, Ulm, Germany
DQB1*04:02:01:08	DNA-14-NAT	MK524387	Mehdi Alizadeh, Rennes, France
DQB1*04:59N	HG00013914	MG701616	Histogenetics, Ossining, USA
DQB1*04:59N	HG00014555	MG756933	Histogenetics, Ossining, USA
DQB1*04:59N	HG00014645	MG769881	Histogenetics, Ossining, USA
DQB1*05:202	HG00015892	MH049675	Histogenetics, Ossining, USA
DQB1*06:03:33	AL00000147	KY428989	Histogenetics, Ossining, USA
DQB1*06:304N	HG00016550	MH215944	Histogenetics, Ossining, USA
DPA1*02:01:01:03	XLI-ND	MK328510	Steven GE Marsh, London, United Kingdom
DPA1*02:01:01:04	BM21	MK610128	Steven GE Marsh, London, United Kingdom
DPA1*02:01:01:06	ARBO	MK328507	Steven GE Marsh, London, United Kingdom
DPA1*02:01:01:07	DNA-58-NAT	MK524394	Mehdi Alizadeh, Rennes, France
DPA1*02:01:02:02	VAVY	MK328509	Steven GE Marsh, London, United Kingdom
DPA1*02:01:04	WIN	MK478065	Steven GE Marsh, London, United Kingdom
DPA1*02:02:02:05	DNA-59-NAT	MK524395	Mehdi Alizadeh, Rennes, France
DPB1*02:01:23	DKMS-LSL_ID14387753	LR137119	DKMS Life Sciences Lab, Dresden, Germany
DPB1*02:01:23	DKMS-LSL_ID15429293	LR137121	DKMS Life Sciences Lab, Dresden, Germany
DPB1*02:01:34	DKMS-LSL_ID15151880	LR137108	DKMS Life Sciences Lab, Dresden, Germany
DPB1*03:01:10	HG00013913	MG701650	Histogenetics, Ossining, USA
DPB1*03:01:10	HG00015026	MG769915	Histogenetics, Ossining, USA
DPB1*04:01:01:01	DKMS-LSL_ID13694772	LR137116	DKMS Life Sciences Lab, Dresden, Germany
DPB1*04:01:37	DKMS-LSL_ID14803145	LR137123	DKMS Life Sciences Lab, Dresden, Germany
DPB1*04:01:38	HG00015072	MG805525	Histogenetics, Ossining, USA
DPB1*04:01:38	HG00015592	MG930742	Histogenetics, Ossining, USA
DPB1*04:01:38	HG00017396	MH670756	Histogenetics, Ossining, USA
DPB1*04:01:38	HG00019317, HG00019318	MK144041, MK144042	Histogenetics, Ossining, USA
DPB1*04:01:38	HG00019320	MK144044	Histogenetics, Ossining, USA
DPB1*04:01:38	HG00019339	MK144063	Histogenetics, Ossining, USA
DPB1*04:01:39	HG00017676	MH758928	Histogenetics, Ossining, USA
DPB1*04:01:39	HG00019321, HG00019344	MK144045, MK144068	Histogenetics, Ossining, USA
DPB1*04:02:11	DKMS-LSL_ID12654507	LR137117	DKMS Life Sciences Lab, Dresden, Germany
DPB1*04:02:11	DKMS-LSL_ID15336534	LR137120	DKMS Life Sciences Lab, Dresden, Germany
DPB1*04:02:13	HG00019306	MK144030	Histogenetics, Ossining, USA
DPB1*04:02:14	HG00015003, HG00015600, HG00019401	MF521541, MG930750, MK144131	Histogenetics, Ossining, USA
DPB1*05:01:09	HG00014527	MG756978	Histogenetics, Ossining, USA
DPB1*10:01:04	HG00015046	MG769935	Histogenetics, Ossining, USA
DPB1*417:01:02	GLM08156	MK481127	Jeremy Sherrill, Ann Arbor, USA
DPB1*675:01	016637801	MK517530	Dominique Masson, La Tronche, France
DPB1*677:01	81153511	KY123258	Daniel Fuerst, Ulm, Germany
DPB1*705:01	DKMS-LSL-DPB1-2858	LS990942	DKMS Life Sciences Lab, Dresden, Germany
DPB1*706:01	DKMS-LSL_ID13923219	LR137118	DKMS Life Sciences Lab, Dresden, Germany
DPB1*706:01	DKMS-LSL_ID15570429	LR137122	DKMS Life Sciences Lab, Dresden, Germany
DPB1*726:01	DKMS-LSL_ID13171133	LR137096	DKMS Life Sciences Lab, Dresden, Germany
DPB1*726:01	DKMS-LSL_ID15016793	LR137097	DKMS Life Sciences Lab, Dresden, Germany
DPB1*762:01	4225012	MK410894	Jonathan Visentin, Bordeaux, France
DPB1*804:01	DKMS-LSL_ID13560783	LR137091	DKMS Life Sciences Lab, Dresden, Germany
DPB1*806:01:01:01	DKMS-LSL_ID13301165	LR137075	DKMS Life Sciences Lab, Dresden, Germany
DPB1*806:01:01:01	HG00009472	KM282250	Histogenetics, Ossining, USA
DPB1*809:01	DKMS-LSL_ID14595993	LR137092	DKMS Life Sciences Lab, Dresden, Germany
DPB1*809:01	DKMS-LSL_ID14597181	LR137093	DKMS Life Sciences Lab, Dresden, Germany
DPB1*823:01	DKMS-LSL_ID14624248	LR137070	DKMS Life Sciences Lab, Dresden, Germany

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Table 2 (continued)

HLA Allele	Cell identification	Accession number	Submitting author
<i>DPB1*835:01</i>	DKMS-LSL-DPB1-1665	LS480686	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*849:01</i>	AN00169	LT596614	Steven GE Marsh, London, United Kingdom
<i>DPB1*881:01</i>	DKMS-LSL_ID15042204	LR137124	DKMS Life Sciences Lab, Dresden, Germany
<i>DPB1*896:01</i>	HG00017759, HG00018889	MH779346, MK058536	Histogenetics, Ossining, USA
<i>DPB1*906:01</i>	151008-81711	MK456490	Jeremy Sherrill, Ann Arbor, USA
<i>DPB1*907:01</i>	30657	MK480466	Kelly Ingram, Winston-Salem, USA

Table 3

Recently Published Sequences.

HLA Allele	References
<i>A*01:288</i>	[4]
<i>A*02:06:23</i>	[4]
<i>A*03:315</i>	[5]
<i>A*11:292</i>	[6]
<i>A*24:20:01:01</i>	[7]
<i>A*26:160</i>	[8]
<i>A*29:02:01:06</i>	[9]
<i>A*30:02:01:04</i>	[10]
<i>A*30:135</i>	[11]
<i>A*31:124</i>	[12]
<i>A*32:121</i>	[4]
<i>A*33:170</i>	[13]
<i>B*15:271</i>	[14]
<i>B*15:435</i>	[15]
<i>B*15:465</i>	[16]
<i>B*18:01:01:17</i>	[17]
<i>B*27:168</i>	[18]
<i>B*35:01:01:16</i>	[19]
<i>B*35:03:23</i>	[20]
<i>B*40:243</i>	[21]
<i>B*40:317</i>	[22]
<i>B*40:379</i>	[23]
<i>B*40:400</i>	[24]
<i>B*44:138Q</i>	[25]
<i>B*45:22</i>	[26]
<i>B*46:01:23</i>	[27]
<i>B*49:01:01:04</i>	[28]
<i>B*51:228</i>	[29]
<i>B*52:56</i>	[30]
<i>B*55:57</i>	[31]
<i>C*02:151</i>	[32]
<i>C*02:163</i>	[33]
<i>C*03:04:71</i>	[34]
<i>C*03:258</i>	[35]
<i>C*03:302</i>	[36]
<i>C*03:365</i>	[37]
<i>C*04:01:01:31</i>	[38]
<i>C*04:01:106</i>	[39]
<i>C*04:348</i>	[33]
<i>C*05:199</i>	[40]
<i>C*05:203</i>	[41]
<i>C*07:18:01:01</i>	[42]
<i>C*07:708</i>	[43]
<i>C*08:147</i>	[44]
<i>C*08:154</i>	[45]
<i>C*15:10:04</i>	[41]
<i>C*17:37</i>	[46]
<i>F*01:01:01:17</i>	[47]
<i>F*01:01:01:18</i>	[47]
<i>F*01:01:01:19</i>	[47]
<i>F*01:01:02:07</i>	[47]
<i>F*01:01:02:09</i>	[47]
<i>F*01:01:02:10</i>	[47]
<i>F*01:01:02:11</i>	[47]
<i>F*01:03:01:03</i>	[47]
<i>F*01:03:01:04</i>	[47]
<i>DRB1*01:99</i>	[41]
<i>DRB1*03:147</i>	[48]
<i>DRB1*07:100</i>	[4]
<i>DRB1*11:245</i>	[49]
<i>DRB1*13:191</i>	[50]

Table 3 (continued)

HLA Allele	References
<i>DRB1*15:01:37</i>	[51]
<i>DRB3*03:01:07</i>	[52]
<i>DRB5*01:01:01:02</i>	[53]
<i>DRB5*02:21</i>	[54]
<i>DQA1*04:05</i>	[55]
<i>DQA1*05:14</i>	[56]
<i>DQB1*03:01:45</i>	[57]
<i>DQB1*05:01:01:05</i>	[58]
<i>DQB1*05:01:24:01</i>	[46]
<i>DQB1*06:276</i>	[59]
<i>DPA1*02:07:01:03</i>	[46]
<i>DPA1*02:09</i>	[46]
<i>DPA1*02:12</i>	[60]
<i>DPA1*03:01:02</i>	[46]
<i>DPA1*04:02</i>	[46]
<i>DPB1*558:01</i>	[46]
<i>DPB1*654:01</i>	[46]
<i>DPB1*835:01</i>	[61]
<i>DPB1*896:01</i>	[62]
<i>MICB*005:09</i>	[63]

## References

- [1] S.G.E. Marsh, Nomenclature for factors of the HLA system, update October, November, and December 2018, *HLA* 93 (2-3) (2019) 140.
- [2] S.G.E. Marsh, E.D. Albert, W.F. Bodmer, R.E. Bontrop, B. Dupont, H.A. Erlich, M. Fernandez-Vina, D.E. Geraghty, R. Holdsworth, C.K. Hurley, M. Lau, K.W. Lee, B. Mach, M. Maiers, W.R. Mayr, C.R. Muller, P. Parham, E.W. Petersdorf, T. Sasazuki, J.L. Strominger, A. Svejgaard, P.I. Terasaki, J.M. Tiercy, J. Trowsdale, Nomenclature for factors of the HLA system, 2010, *Tissue Antigen*. 75 (4) (2010) 291.
- [3] J. Robinson, J.A. Halliwell, J.D. Hayhurst, P. Flicek, P. Parham, S.G.E. Marsh, The IPD and IMGT/HLA database: allele variant databases, *Database issue, Nucleic Acids Res.* 43 (2015) D423.
- [4] M. Loginova, A. Pavlov, M. Zaytseva, T. Simakova, I. Paramonov, Description of four new HLA alleles: HLA-A\*01:288, -A\*02:06:23, -A\*32:121 and -DRB1\*07:100, *HLA* 93 (4) (2019) 220.
- [5] M. Cargou, V. Elsermans, I. Top, G. Guidicelli, J. Visentin, Characterization of the novel HLA-A\*03:315 allele by sequencing-based typing, *HLA* 93 (1) (2019) 39.
- [6] K.L. Yang, P.Y. Lin, Detection of a novel HLA-A\*11 variant, A\*11:292, in a Taiwanese individual, *HLA* 93 (1) (2019) 40.
- [7] S.Y. Mei, Y. Wang, X.S. Huang, Y.P. Xu, J. Zhao, Genomic full-length sequence of the HLA-A\*24:20:01:01 allele, identified by cloning and sequencing, *HLA* 93 (1) (2019) 42.
- [8] K.L. Yang, P.Y. Lin, HLA-A\*26:160, a novel variant of HLA-A\*26, discovered in a Taiwanese individual, *HLA* 93 (1) (2019) 45.
- [9] A. Alblaihed, M. Alburraq, A. Alanazi, F. AlSebaiheen, A. Alshubaili, Identification of the novel HLA-A\*29:02:01:06 allele in a Saudi individual, *HLA* 93 (2-3) (2019) 102.
- [10] M. Gattan, F. Aloufi, H. Alanazi, A. Alqasem, A.H. Hajeer, Identification of the novel HLA-A\*30:02:01:04 allele in a Saudi individual, *HLA* 93 (2-3) (2019) 103.
- [11] M. Cargou, M. Ralazamahaleo, L. Blouin, G. Guidicelli, J. Visentin, Characterization of the novel HLA-A\*30:135 allele by sequencing-based typing, *HLA* 93 (1) (2019) 46.
- [12] N. Chen, L. Dong, W. Zhang, J. He, Z. Faming, Identification of the novel HLA-A\*31:124 allele by sequence-based typing in a Chinese cord blood donor, *HLA* 93 (2-3) (2019) 104.
- [13] M. Cargou, V. Elsermans, I. Top, G. Guidicelli, J. Visentin, Characterization of the novel HLA-A\*33:170 allele by sequencing-based typing, *HLA* 93 (4) (2019) 221.
- [14] K. Wu, Y. Liu, Z. Tang, G. Li, Characterization of the novel HLA-B\*15:271 allele by sequencing-based typing in a Chinese bone marrow donor, *HLA* 93 (2-3) (2019) 106.
- [15] H.Y. Zou, Y.P. Zhong, W.X. Hong, Characterization of the novel HLA-B\*15:435

- allele by next-generation sequencing in a Chinese family, HLA 93 (2-3) (2019) 108.
- [16] A. Hedin, C. Knutson, M. Bengtsson, A new allele found in a volunteer hematopoietic stem cell donor: HLA-B\*15:465, HLA 93 (4) (2019) 223.
- [17] A. Alqasem, F. Aloufi, M. Gattan, H. Alanazi, A.H. Hajeer, Identification of the novel HLA-B\*18:01:01:17 allele in a Saudi individual, HLA 93 (2-3) (2019) 110.
- [18] K.L. Yang, P.Y. Lin, Discovery of a novel HLA-B\*27 variant, B\*27:168, by sequence-based typing in a Taiwanese blood donor, HLA 93 (1) (2019) 48.
- [19] H. Alanazi, A. Alqasem, F. Aloufi, M. Algattan, A.H. Hajeer, Identification of the novel HLA-B\*35:01:01:16 allele in a Saudi individual, HLA 93 (2-3) (2019) 111.
- [20] V. Seshasubramanian, A.D. SathishKannan, C. Naganathan, N.K. Manisekar, S. Narayan, Identification of the novel HLA allele, HLA-B\*35:03:23, by next-generation sequencing, HLA 93 (2-3) (2019) 112.
- [21] J.W. Zheng, J.H. Xie, Y. Sun, D. Xiang, Characterization of the novel HLA-B\*40:243 allele, HLA 93(2-3) (2019) 114.
- [22] W. Xie, W.X. Li, R. Yang, The novel HLA-B\*40:317 allele was identified in a leukemia patient during high-resolution HLA typing, HLA 93 (2-3) (2019) 116.
- [23] V. Seshasubramanian, A.D. SathishKannan, C. Naganathan, Y. Nandakumar, S. Narayan, Identification of the novel allele, HLA-B\*40:379, by next-generation sequencing, HLA 93 (2-3) (2019) 117.
- [24] K.L. Yang, P.Y. Lin, HLA-B\*40:400, a novel HLA-B\*40 variant, identified in a Taiwanese individual, HLA 93 (2-3) (2019) 113.
- [25] I. Fae, S. Wenda, C. Grill, G.F. Fischer, HLA-B\*44:138Q: Evidence for a confined deletion and recombination events in an otherwise unaffected HLA-haplotype, HLA 93 (2-3) (2019) 89.
- [26] B.A. Dukek, M.D. Zuccarelli, L.L. Wakefield, J.D. Kreuter, M.J. Gandhi, HLA-B\*45:22: a novel allele that differs from HLA-B\*45:01:01 at several locations, HLA 93 (1) (2019) 49.
- [27] F. Wang, W. Wang, W. Zhang, J. He, Z. Faming, Characterization of the novel HLA-B\*46:01:23 allele in a Chinese bone marrow donor, HLA 93 (4) (2019) 224.
- [28] A. Alshubaili, F. AlSebaiheen, A. Alblaihed, M. Alburraq, A. Alanazi, Identification of the novel HLA-B\*49:01:01:04 allele in a Saudi individual, HLA 93 (2-3) (2019) 119.
- [29] L. Dong, F. Wang, W. Zhang, J. He, Z. Faming, Characterization of the novel HLA-B\*51:228 allele in a Chinese individual, HLA 93 (2-3) (2019) 120.
- [30] W. Li, J. Xu, R. Yang, W. Shi, Identification of the novel HLA-B allele, HLA-B\*52:56 by sequence-based typing in a Chinese individual, HLA 93 (4) (2019) 226.
- [31] J. Yang, Y. Jiang, Y. Sun, J. Xie, D. Xiang, Identification of a novel HLA-B\*55 allele, HLA-B\*55:57, in a Chinese individual, HLA 93 (2-3) (2019) 122.
- [32] M. Loginova, V. Zakharova, A. Pavlov, T. Simakova, I. Paramonov, Identification of the novel HLA-C\*02:151 allele in Russian bone marrow donors, HLA 93 (2-3) (2019) 124.
- [33] M. Loginova, I. Paramonov, Two novel HLA alleles, HLA-C\*02:163 and HLA-C\*04:348, identified in Russian individuals, HLA 93 (4) (2019) 228.
- [34] K.L. Yang, P.Y. Lin, Detection of an HLA-C\*03:04 variant, HLA-C\*03:04:71, in a Taiwanese individual, HLA 93 (4) (2019) 229.
- [35] K.L. Yang, P.Y. Lin, Detection of an HLA-C\*03 variant, HLA-C\*03:258, in a Taiwanese individual, HLA 93 (2-3) (2019) 125.
- [36] V. Elsermans, J. Visentin, I. Top, P. Varlet, M. Labalette, Characterization of the novel HLA-C\*03:302 allele by sequencing-based typing, HLA 93 (1) (2019) 51.
- [37] N. Chen, F. Wang, L. Dong, J. He, F. Zhu, Identification of the novel HLA-C\*03:365 allele in a Chinese bone marrow donor, HLA 93 (4) (2019) 231.
- [38] F. Aloufi, H. Alanazi, A. Alqasem, M. Gattan, A.H. Hajeer, Identification of the novel HLA-C\*04:01:01:31 allele in a Saudi individual, HLA 93 (2-3) (2019) 127.
- [39] M. Catalano, N. Preziosi, G. Iaquina, M. Testi, P. Grammatico, A new HLA-C\*04 variant, HLA-C\*04:01:106, discovered in an Italian hematopoietic stem cell donor, HLA 93 (4) (2019) 232.
- [40] D. Planelles, A. Balas, M. Rodriguez-Cebria, M. Luis-Hidalgo, J.L. Vicario, The new HLA-C\*05:199 was generated by intralocus recombination involving C\*05:01:01:01 and C\*16:01:01:01 alleles, HLA 93 (2-3) (2019) 128.
- [41] A. Balas, D. Planelles, M. Rodriguez-Cebria, M. Luis-Hidalgo, J.L. Vicario, Identification of three new HLA alleles in the Spanish population: HLA-C\*05:203, C\*15:10:04 and DRB1\*01:99, HLA 93 (4) (2019) 234.
- [42] K.L. Yang, P.Y. Lin, A possible association of HLA-C\*07:18:01:01 and HLA-B\*58:01, HLA 93 (1) (2019) 52.
- [43] M. Cargou, M. Andreani, M. Battarra, G. Guidicelli, J. Visentin, Characterization of the novel HLA-C\*07:708 allele by sequencing-based typing, HLA 93 (4) (2019) 235.
- [44] K.L. Yang, P.Y. Lin, Detection of HLA-C\*08:147, an HLA-C\*08 variant, in a Taiwanese hematopoietic stem cell donor, HLA 93 (4) (2019) 237.
- [45] W. Wang, F. Wang, W. Zhang, J. He, F. Zhu, Characterization of the novel HLA-C\*08:154 allele by sequencing-based typing, HLA 93 (4) (2019) 238.
- [46] Y.R. Thorstenson, L.E. Creary, H. Huang, V. Rozot, T.T. Nguyen, F. Babrzadeh, S. Kancharla, M. Fukushima, R. Kuehn, C. Wang, M. Li, S. Krishnakumar, M. Mindrinos, M.A. Fernandez Vina, T.J. Scriba, M.M. Davis, Allelic resolution NGS HLA typing of Class I and Class II loci and haplotypes in Cape Town, South Africa, Hum. Immunol. 79 (12) (2018) 839.
- [47] J. Paganini, A. Ramdane, P. Gouret, J. Chiaroni, J. Di Cristofaro, Validation of new HLA-F alleles assigned by next-generation sequencing, HLA 93 (2-3) (2019) 131.
- [48] M. Ralazamahaleo, V. Elsermans, I. Top, G. Guidicelli, J. Visentin, Characterization of the novel HLA-DRB1\*03:147 allele by sequencing-based typing, HLA 93 (1) (2019) 53.
- [49] L.Q. Zhang, Y. Xiao, X.Y. Zhou, J. Cui, J.P. Cai, Characterization of the novel HLA-DRB1\*11:245 allele by sequencing-based typing, HLA 93 (2-3) (2019) 133.
- [50] V. Elsermans, J. Visentin, I. Top, M. Labalette, P. Varlet, Characterization of the novel HLA-DRB1\*13:191 allele by sequencing-based typing, HLA 93 (1) (2019) 55.
- [51] K.L. Yang, P.Y. Lin, The novel HLA-DRB1\*15:01:37 allele discovered in a Taiwanese individual, HLA 93 (2-3) (2019) 134.
- [52] M. Ralazamahaleo, M. Andreani, T. Galluccio, G. Guidicelli, J. Visentin, Characterization of the novel HLA-DRB3\*03:01:07 allele by sequencing-based typing, HLA 93 (4) (2019) 240.
- [53] R. Wu, D. Peng, N. Wang, H. Sun, J. Li, Identification of the new HLA-DRB5\*01:01:01:02 allele in a Chinese individual, HLA 93 (1) (2019) 56.
- [54] M. Cargou, M. Ralazamahaleo, L. Blouin, G. Guidicelli, J. Visentin, Characterization of the novel HLA-DRB5\*02:21 allele by sequencing-based typing, HLA 93 (1) (2019) 58.
- [55] M. Cargou, M. Ralazamahaleo, L. Blouin, G. Guidicelli, J. Visentin, Characterization of the novel HLA-DQA1\*04:05 allele by sequencing-based typing, HLA 93 (1) (2019) 59.
- [56] M. Cargou, M. Andreani, M. Troiano, G. Guidicelli, J. Visentin, Characterization of the novel HLA-DQA1\*05:14 allele by sequencing-based typing, HLA 93 (4) (2019) 241.
- [57] L.Q. Zhang, Y. Xiao, X.Y. Zhou, J. Cui, J.P. Cai, Characterization of the novel HLA-DQB1\*03:01:45 allele by sequencing-based typing, HLA 93 (2-3) (2019) 136.
- [58] F. AlSebaiheen, A. Alblaihed, M. Alburraq, A. Alanazi, A. Alshubaili, Identification of the novel HLA-DQB1\*05:01:01:05 allele in a Saudi individual, HLA 93 (2-3) (2019) 137.
- [59] B.L. Honge, M. Christiansen, C. Medina, B.K. Moller, C. Erikstrup, HLA-DQB1\*06:276, a novel HLA allele found in a patient from Guinea-Bissau, HLA 93 (4) (2019) 243.
- [60] M. Cargou, M. Ralazamahaleo, L. Blouin, G. Guidicelli, J. Visentin, Characterization of the novel HLA-DPA1\*02:12 allele by sequencing-based typing, HLA 93 (1) (2019) 61.
- [61] J.B. Sherrill, N. Cereb, C.S. Ho, Identification of a novel allele, HLA-DPB1\*835:01, in an African American renal transplant candidate, HLA 93 (4) (2019) 245.
- [62] M. Cargou, V. Elsermans, I. Top, G. Guidicelli, J. Visentin, Characterization of the novel HLA-DPB1\*896:01 allele by sequencing-based typing, HLA 93 (4) (2019) 246.
- [63] M. Tursun, Z. Wang, W. Guo, A. Hasim, W. Tian, Characterization of a novel MICB variant in an individual from the Chinese Uyghur population, MICB\*005:09, by cloning and sequencing, Int. J. Immunogenet. 46 (1) (2019) 17.