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TEST INFO

Patient ID: AGEA128	Sample ID: 19-027228	Kit Name: LinkS_{eq} HLA ABCDRDQDP+
Patient Name: AGEA128, DECEASED	Sample Date:	Kit Lot #: K3683-CR
Test Date: 5/1/2019		Plate 1 ID: SX271816-APG
		Kit Exp Date: 2020-03-31

SUMMARY

This session includes tests for A, B, C, DR, DQA, DQB, DPA and DPB

TEST	GENOTYPE	PHENOTYPE	TEST	GENOTYPE	PHENOTYPE
HLA-A	A*02 A*68	A2 A68	HLA-C	C*05 C*08	Cw5 Cw8
HLA-B	B*14 B*44	B65 B44	Bw		Bw4 Bw6
HLA-DRB1	DRB1*03 DRB1*04	DR17 DR4	HLA-DRB345	DRB3*02 DRB4*01	DR52 DR53
HLA-DQA1	DQA1*03 DQA1*05	DQA1*03 DQA1*05	HLA-DQB1	DQB1*02 DQB1*03	DQ2 DQ8
HLA-DPA1	DPA1*01 DPA1*02	DPA1*01 DPA1*02			

EPITYPE	ALLELES	HVR-A	HVR-B	HVR-C	HVR-D	HVR-E	HVR-F
EDP03	DPB1* 104:01:01:01d; DPB1* 03:01:02e-03:01:07e / DPB1* 104:01:01:02e-104:01:01:03e / DPB1* 111:01e / DPB1* 221:01e / DPB1* 222:01e / DPB1* 270:01e / DPB1* 293:01e / DPB1* 329:01e / DPB1* 391:01e / DPB1* 404:01e / DPB1* 405:01e / DPB1* 439:01e / DPB1* 472:01e / DPB1* 509:01e / DPB1* 548:01e / DPB1* 568:01e / DPB1* 610:01e / DPB1* 645:01e / DPB1* 664:01e	VYQL	EEFV	DED	LLEEK	V	DEAV
EDP14	DPB1* 14:01:01:01; DPB1* 14:01:01:02e-14:01:04e / DPB1* 243:01e / DPB1* 383:01e / DPB1* 409:01e / DPB1* 445:01e / DPB1* 446:01e / DPB1* 492:01e / DPB1* 498:01e / DPB1* 572:01e / DPB1* 629:01e	VHQL	EEFV	DED	LLEEK	V	DEAV
<i>One side of this epitope requires a RARE allele, review results to confirm assignment. This epitope was MANUALLY chosen.</i>							

The HLA-DPB1 test result requires a RARE allele assignment.

*(Notice: Cannot exclude other combinations. Review all results.)
All test results are based on IMGT/HLA release: version 3.29.0 - July 2017*

For research use only. Not for use in diagnostic procedures.

LABORATORY ASSIGNMENT

HLA-A: **A2 A68**
HLA-C: **Cw5 Cw8**
HLA-DQA1: **DQA1*03 DQA1*05**
HLA-DPA1: **DPA1*01 DPA1*02**

HLA-B: **B65 B44**
HLA-DRB1: **DR17 DR4**
HLA-DQB1: **DQ2 DQ8**
HLA-DPB1: **DPB1*104:01+
DPB1*14:01+**

Bw: **Bw4 Bw6**
HLA-DRB345: **DR52 DR53**

NOTES

The plus (+) sign indicates the presences of additional alleles of DPB1* that cannot be ruled out.

REVIEW

Analyzed By: **Dena Laurence**

Signature:

Date:

Reviewed By:

Signature:

Date:

HLA-A

ALLELE GROUP	ALLELES	P GROUP	ANTIGEN
A*02	A* 02:01:01:01, 02:01:04, 02:09; A* 02:01:01:02Le-02:01:03e, 02:01:05e-02:01:08e, 02:01:10e-02:01:13e, 02:01:15e, 02:01:18e-02:01:35e, 02:01:37e-02:01:51e, 02:01:53e-02:01:73e, 02:01:75e-02:01:132e, 02:66e, 02:89e, 02:97e	02:01P	A2
	A* 02:02:01:01; A* 02:02:01:02e-02:02:04e	02:02P	
	A* 02:04	02:04P	
	A* 02:05:01:01; A* 02:05:01:02e-02:05:02e, 02:05:04e, 02:05:06e	02:05P	
	A* 02:06:01:01; A* 02:06:01:02e-02:06:06e, 02:06:08e-02:06:11e, 02:06:13e-02:06:22e	02:06P	
	A* 02:07:01; A* 02:07:02e-02:07:09e	02:07P	
	A* 02:11:01; A* 02:11:03e-02:11:09e	02:11P	
	<i>A* 02:16d</i>	02:16P	
	A* 02:17:01; A* 02:17:02e-02:17:04e	02:17P	
	A* 02:20:01; A* 02:20:02e	02:20P	
	A* 02:22:01:01; A* 02:22:01:02e-02:22:02e	02:22P	
	A* 02:24:01; A* 02:24:02e	02:24P	
	<i>A* 02:49d</i>	02:49P	
	<i>A* 02:74:01d;</i> A* 02:74:02e	02:74P	
	A* 02:79:01e	02:79P	
	A* 02:08, 02:14; <i>A* 02:12d-02:13d, 02:18d, 02:21d, 02:25d, 02:29d, 02:34d;</i> A* 02:31e, 02:41e-02:42e, 02:59e, 02:67e-02:68e, 02:70e-02:72e, 02:77e, 02:90e, 02:105e	-	
	A* 02:03:05e	02:03P	A203
	A* 02:15Ne, 02:32Ne, 02:43Ne, 02:82Ne-02:83Ne, 02:88Ne, 02:94Ne, 02:113Ne, 02:125Ne	-	Null
	A* 02:01:14Qe, 02:75e, 02:132e, 02:134e, 02:140e, 02:241e, 02:252e, 02:256e, 02:266e, 02:291e, 02:294e, 02:327e, 02:329e, 02:357e, 02:397e, 02:411e, 02:446e, 02:455e, 02:469e, 02:481e, 02:538e, 02:559e, 02:607e, 02:614e, 02:629e, 02:642e, 02:665e, 02:685e-02:687e, 02:689e-02:690e, 02:692e	02:01P	-
	A* 02:664e	02:04P	
	A* 02:179e, 02:324e	02:05P	

A* 02:126e, 02:428e, 02:625e	02:06P
A* 02:265e, 02:426e, 02:452e	02:07P
A* 02:69e	02:11P
<i>A* 02:131d</i>	02:16P
A* 02:104e	02:22P
A* 02:30:01; A* 02:30:02e	02:30P
A* 02:40e	02:40P
A* 02:683e	02:49P
A* 02:56:01e	02:56P
A* 02:60:01; A* 02:60:02e	02:60P
<i>A* 02:64:01d</i>	02:64P
A* 02:76:01e	02:76P
<i>A* 02:86:01d</i>	02:86P
A* 02:101e	02:101P
A* 02:153e	02:153P
A* 02:157e	02:157P
A* 02:164e	02:164P
A* 02:197e	02:197P
A* 02:211e	02:211P
A* 02:217e	02:217P
A* 02:243:01e	02:243P
A* 02:289e	02:289P
A* 02:419e	02:419P
A* 02:524:01e	02:524P
A* 02:528:01e	02:528P
A* 02:591:02e	02:591P
A* 02:610e	02:610P
<i>A* 02:27d, 02:33d, 02:36d, 02:44d-02:45d, 02:58d, 02:63d, 02:84d-02:85d, 02:96d, 02:119d, 02:123d, 02:137d;</i> A* 02:26e, 02:28e, 02:37e, 02:47e, 02:51e, 02:54e, 02:57e, 02:61e-02:62e, 02:80e, 02:91e-02:92e, 02:99e, 02:102e, 02:106e-02:109e, 02:111e, 02:115e-02:116e, 02:118e, 02:120e-02:121e, 02:127e-02:128e, 02:130e, 02:133e, 02:138e-02:139e, 02:141e-02:142e, 02:144e-02:147e, 02:149e-02:151e, 02:154e-02:155e, 02:158e-02:163e, 02:165e-02:168e, 02:170e, 02:172e-02:178e, 02:180e-02:184e, 02:186e-02:194e, 02:196e, 02:198e-02:210e, 02:212e-02:216e, 02:218e-02:229e, 02:231e-02:236e, 02:238e-02:240e, 02:245e-02:251e, 02:254e-02:255e, 02:257e, 02:259e-02:263e, 02:267e-02:278e, 02:283e-02:288e, 02:290e, 02:292e-02:293Qe, 02:295e-02:299e, 02:301Ne-02:303e, 02:305Ne-02:308e, 02:310e-02:314Ne, 02:316e-02:323e, 02:325e-02:326e, 02:328e, 02:330e-02:338e, 02:340e-02:344e,	-

	02:346e-02:354e, 02:356Ne, 02:358e-02:369e, 02:371e-02:396e, 02:399e-02:408e, 02:410e, 02:413e-02:418e, 02:420e-02:425e, 02:429e-02:430e, 02:432e-02:445e, 02:448e-02:451e, 02:456e-02:462e, 02:464e-02:465e, 02:467e-02:468Ne, 02:470e-02:479e, 02:482e-02:503e, 02:506Ne-02:523e, 02:525Ne-02:526e, 02:530e-02:537e, 02:539e-02:543e, 02:545e-02:556e, 02:558e, 02:560e-02:567e, 02:569e, 02:572e-02:579e, 02:581e, 02:583e-02:590e, 02:592e-02:593e, 02:595e-02:600e, 02:602e-02:603e, 02:605Qe-02:606e, 02:608Ne-02:609e, 02:611e, 02:613e, 02:615e-02:618Qe, 02:620e-02:624e, 02:626e-02:627e, 02:632e, 02:635e-02:640e, 02:643Ne, 02:645e-02:650e, 02:652e-02:663e, 02:667e-02:680e, 02:682e, 02:688e, 02:691Ne, 02:693e-02:694e		
A*68	A* 68:12d, 68:17d; A* 68:26e	-	A28
	A* 68:01:01:01, 68:01:02:01; A* 68:01:01:02e-68:01:01:03e, 68:01:02:02e-68:01:27e, 68:01:29e-68:01:35e, 68:33e	68:01P	A68
	A* 68:02:01:01; A* 68:02:01:02d; A* 68:02:01:03e-68:02:12e	68:02P	
	A* 68:08:01d; A* 68:08:02e	68:08P	
	A* 68:16e, 68:36e	-	Null
	A* 68:11Nd; A* 68:18Ne	-	
	A* 68:96e, 68:144e, 68:152e, 68:164e	68:01P	-
	A* 68:163e	68:02P	
	A* 68:21e	68:21P	
	A* 68:27:01d; A* 68:27:02e	68:27P	
	A* 68:43e	68:43P	
	A* 68:55e	68:55P	
	A* 68:58e	68:58P	
	A* 68:75e	68:75P	
	A* 68:76e	68:76P	
	A* 68:103e	68:103P	
	A* 68:104e	68:104P	
	A* 68:112e	68:112P	
	A* 68:119e	68:119P	
	A* 68:06d-68:07d, 68:22d, 68:24d-68:25d, 68:35d, 68:37d, 68:40d; A* 68:09e, 68:23e, 68:28e-68:29e, 68:32e, 68:34e, 68:38e-68:39e, 68:41e-68:42e, 68:44e-68:54e, 68:56e-68:57e, 68:59Ne-68:60e, 68:62e-68:65e, 68:67e-68:70e, 68:72e-68:74e, 68:77e-68:89e, 68:91e-68:95e, 68:97e-68:102e, 68:105e-68:108e, 68:110e-68:111e, 68:113e-68:118e, 68:120Ne-68:129e, 68:131e-68:133e, 68:135e-68:143e, 68:145e-68:151e, 68:153e-68:162e, 68:165e-68:166e	-	
This genotype was chosen as the most likely; cannot exclude one or more rare genotypes.			

HLA-B

ALLELE GROUP	ALLELES	P GROUP	ANTIGEN
B*14	B* 14:06:02e	14:06P	B14
	B* 14:02:01:01; B* 14:02:01:02e-14:02:15e	14:02P	B65
	<i>B* 14:09d;</i> B* 14:15e-14:17e, 14:20e, 14:22e, 14:24e-14:25e, 14:27e, 14:29e-14:31e, 14:34e-14:36e, 14:38e-14:39e, 14:41Ne, 14:43e-14:45e, 14:50e-14:52e	-	-
B*44	B* 44:02:01:01, 44:27:01; B* 44:02:01:03e-44:02:03e, 44:02:05e-44:02:08e, 44:02:10e-44:02:47e, 44:27:02e	44:02P	B44
	B* 44:03:01:01, 44:03:02; B* 44:03:01:02e-44:03:01:10e, 44:03:03e-44:03:13e, 44:03:15e-44:03:39e	44:03P	
	B* 44:53:01e	44:53P	
	B* 44:04; <i>B* 44:07d, 44:12d, 44:29d;</i> B* 44:13e-44:14e, 44:32e	-	
	<i>B* 44:23Nd;</i> B* 44:19Ne	-	Null
	B* 44:02:01:02Se	44:02P	Soluble
	B* 44:66e, 44:118e, 44:173e, 44:187e, 44:243e, 44:262e, 44:270e	44:02P	-
	B* 44:28e	44:28P	
	B* 44:34e	44:34P	
	B* 44:41e	44:41P	
	B* 44:59e	44:59P	
	B* 44:69e	44:69P	
	B* 44:126e	44:126P	
	B* 44:128e	44:128P	
	B* 44:192:01e	44:192P	
	<i>B* 44:21d-44:22d, 44:24d;</i> B* 44:11e, 44:26e, 44:30e, 44:33e, 44:35e-44:36e, 44:38e-44:39e, 44:45e, 44:48e-44:49e, 44:51e, 44:56Ne, 44:61Ne, 44:63e, 44:65e, 44:67e-44:68e, 44:71e-44:74e, 44:76e, 44:80e-44:81e, 44:85e-44:89e, 44:92e-44:94e, 44:96e, 44:98e-44:102e, 44:104e-44:105e, 44:108Ne, 44:111e-44:116e, 44:119e-44:122e, 44:124e-44:125e, 44:127e, 44:133e, 44:137e-44:138Qe, 44:141e-44:143e, 44:145e, 44:147e-44:149Ne, 44:151e-44:155e, 44:157e, 44:159e-44:165e, 44:167e-44:168e, 44:170e-44:172e, 44:174e-44:175e, 44:177e-44:181e, 44:183e, 44:185e-44:186e, 44:188e-44:189e, 44:191e, 44:193e, 44:196e-44:204e, 44:206e-44:209e, 44:214e-44:220e, 44:222e-44:223e, 44:227e-44:229e, 44:231e, 44:233e, 44:235e, 44:237Ne-44:242e, 44:244e-44:249e, 44:252e-44:253e, 44:255e, 44:259e-44:261e, 44:265e-44:267Ne, 44:271e	-	

	ALLELES	ANTIGEN
Bw4	B* 44:02:01:01, 44:03:01:01, 44:03:02, 44:04, 44:27:01; <i>B* 44:07d, 44:12d, 44:21d-44:24d, 44:29d;</i> B* 44:02:01:02Se-44:02:03e, 44:02:05e-44:02:08e, 44:02:10e-44:02:47e, 44:03:01:02e-44:03:01:10e, 44:03:03e-44:03:13e, 44:03:15e-44:03:39e, 44:11e, 44:13e-44:14e, 44:19Ne, 44:26e, 44:27:02e-44:28e, 44:30e, 44:32e-44:36e, 44:38e-44:39e, 44:41e, 44:45e, 44:48e-44:49e, 44:51e, 44:53:01e, 44:56Ne, 44:59e, 44:61Ne, 44:63e, 44:65e-44:69e, 44:71e-44:74e, 44:76e, 44:80e-44:81e, 44:85e-44:89e, 44:92e-44:94e, 44:96e, 44:98e-44:102e, 44:104e-44:105e, 44:108Ne, 44:111e-44:116e, 44:118e-44:122e, 44:124e-44:128e, 44:133e, 44:137e-44:138Qe, 44:141e-44:143e, 44:145e, 44:147e-44:149Ne, 44:151e-44:155e, 44:157e, 44:159e-44:165e, 44:167e-44:168e, 44:170e-44:175e, 44:177e-44:181e, 44:183e, 44:185e-44:189e, 44:191e-44:192:01e, 44:193e, 44:196e-44:204e, 44:206e-44:209e, 44:214e-44:220e, 44:222e-44:223e, 44:227e-44:229e, 44:231e, 44:233e, 44:235e, 44:237Ne-44:249e, 44:252e-44:253e, 44:255e, 44:259e-44:262e, 44:265e-44:267Ne, 44:270e-44:271e	Bw4
Bw6	B* 14:02:01:01; <i>B* 14:09d;</i> B* 14:02:01:02e-14:02:15e, 14:06:02e, 14:15e-14:17e, 14:20e, 14:22e, 14:24e-14:25e, 14:27e, 14:29e-14:31e, 14:34e-14:36e, 14:38e-14:39e, 14:41Ne, 14:43e-14:45e, 14:50e-14:52e	Bw6

HLA-C

ALLELE GROUP	ALLELES	P GROUP	ANTIGEN
C*05	C* 05:01:01:01; <i>C* 05:01:01:02d;</i> C* 05:01:01:03e-05:01:11e, 05:01:13e-05:01:35e	05:01P	Cw5
	<i>C* 05:07Nd</i>	-	Null
	C* 05:03e, 05:37e, 05:53e, 05:93e, 05:108e, 05:145e	05:01P	-
	<i>C* 05:04:01d;</i> C* 05:04:02e	05:04P	
	<i>C* 05:05:01d;</i> C* 05:05:02e	05:05P	
	<i>C* 05:09:01d;</i> C* 05:09:02e-05:09:03e	05:09P	
	C* 05:22e	05:22P	
	C* 05:29:01e	05:29P	
	C* 05:44e	05:44P	
	C* 05:58:02e	05:58P	
	C* 05:64e	05:64P	
	<i>C* 05:10d, 05:14d;</i> C* 05:06e, 05:11e, 05:13e, 05:15e, 05:19e, 05:21e, 05:23e-05:28e, 05:30e-05:35e, 05:38e-05:43e, 05:45e-05:51Qe, 05:54e-05:57e, 05:59e-05:63e, 05:65e-05:67e, 05:69e-05:75e, 05:77e, 05:80e-05:84e, 05:86e-05:88e, 05:90e-05:92Ne, 05:94e-05:96e, 05:98e-05:102e, 05:104e, 05:109e-05:114e, 05:116e-05:131e, 05:133e, 05:135e-05:142e, 05:144e, 05:146e-05:147e, 05:149e-05:150e, 05:152e-05:154Ne	-	

ALLELE GROUP	ALLELES	P GROUP	ANTIGEN
C*08	C* 08:01:18e	08:01P	Cw8
	C* 08:02:01:01; C* 08:02:01:02e-08:02:15e	08:02P	
	C* 08:04:01; C* 08:04:02e-08:04:03e	08:04P	
	C* 08:75e, 08:110e	08:02P	-
	C* 08:15e	08:15P	
	C* 08:33e	08:33P	
	<i>C* 08:05d;</i> C* 08:07e, 08:17e-08:19e, 08:23e, 08:28e, 08:30e, 08:32e, 08:34e-08:35e, 08:37e, 08:39e, 08:43e, 08:45e, 08:48e-08:49e, 08:51e-08:55Ne, 08:62e-08:63e, 08:66e-08:71e, 08:73e-08:74e, 08:76e-08:77e, 08:90e, 08:92e-08:93e, 08:95e, 08:100e, 08:103e-08:104e, 08:107e-08:108e, 08:111e-08:116e, 08:120e, 08:123e, 08:125e, 08:132e, 08:134e, 08:138e-08:140e, 08:142e, 08:146e, 08:150e-08:152e	-	

HLA-DR

HLA-DRB1

ALLELE GROUP	ALLELES	P GROUP	ANTIGEN
DRB1*03	<i>DRB1* 03:06d, 03:23d;</i> DRB1* 03:12e	-	DR3
	DRB1* 03:01:01:01; <i>DRB1* 03:01:02d;</i> DRB1* 03:01:01:02e-03:01:01:03e, 03:01:03e-03:01:05e, 03:01:07e-03:01:26e	03:01P	DR17
	<i>DRB1* 03:04:01d;</i> DRB1* 03:04:02e	03:04P	
	DRB1* 03:11:01e	03:11P	
	DRB1* 03:124e, 03:132e, 03:137e	03:01P	-
	DRB1* 03:13e	03:13P	
	DRB1* 03:71e	03:71P	
	DRB1* 03:100e	03:100P	
	<i>DRB1* 03:16d, 03:22d;</i> DRB1* 03:18e-03:20e, 03:25e-03:26e, 03:28e, 03:30e-03:34e, 03:36e-03:37e, 03:39e, 03:43e-03:48e, 03:50e-03:52e, 03:54e-03:56e, 03:58e-03:62e, 03:64e, 03:66e-03:70e, 03:72e-03:73e, 03:77e, 03:79e-03:80e, 03:82e-03:86e, 03:89e, 03:91e, 03:93e-03:96e, 03:98e-03:99e, 03:104e, 03:106e-03:114e, 03:116e-03:117e, 03:121e, 03:123e, 03:127e-03:129e, 03:133e-03:136e, 03:138e-03:139e	-	

ALLELE GROUP	ALLELES	P GROUP	ANTIGEN
DRB1*04	DRB1* 04:01:01:01; DRB1* 04:01:01:02e-04:01:17e	04:01P	DR4
	DRB1* 04:02:01; DRB1* 04:02:02e-04:02:05e	04:02P	
	DRB1* 04:03:01; <i>DRB1* 04:03:02d</i> ; DRB1* 04:03:03e-04:03:13e	04:03P	
	DRB1* 04:04:01; DRB1* 04:04:02e-04:04:11e	04:04P	
	DRB1* 04:05:01:01; DRB1* 04:05:01:02e-04:05:18e	04:05P	
	DRB1* 04:06:01; DRB1* 04:06:02e-04:06:06e	04:06P	
	DRB1* 04:07:01:01; DRB1* 04:07:01:02e-04:07:06e	04:07P	
	DRB1* 04:08:01; DRB1* 04:08:02e-04:08:04e	04:08P	
	DRB1* 04:10:01; DRB1* 04:10:02e-04:10:03e	04:10P	
	DRB1* 04:11:01; DRB1* 04:11:02e-04:11:04e	04:11P	
	DRB1* 04:17:02; DRB1* 04:17:01e	04:17P	
	DRB1* 04:09; <i>DRB1* 04:13d-04:14d, 04:16d, 04:19d, 04:23d, 04:25d-04:26d</i> ; DRB1* 04:20e-04:21e, 04:24e, 04:28e-04:29e, 04:31e-04:32e, 04:42e, 04:64e	-	
	DRB1* 04:218e	04:03P	-
	DRB1* 04:232e	04:05P	
	DRB1* 04:92e	04:07P	
	DRB1* 04:201e	04:10P	
	DRB1* 04:44e	04:44P	
	DRB1* 04:53e	04:53P	
	DRB1* 04:56e	04:56P	
	DRB1* 04:72e	04:72P	
	DRB1* 04:95e	04:95P	
	DRB1* 04:98e	04:98P	
	DRB1* 04:105e	04:105P	
	DRB1* 04:131e	04:131P	

DRB1* 04:38;

DRB1 04:12d, 04:18d, 04:33d, 04:35d, 04:40d-04:41d, 04:50d-04:51d, 04:54d;*
DRB1* 04:27e, 04:30e, 04:36e-04:37e, 04:39e, 04:43e, 04:45e-04:49e, 04:52e,
04:55e, 04:57e-04:60e, 04:62e, 04:65e, 04:67e-04:71e, 04:73e-04:91e,
04:93e-04:94Ne, 04:96e-04:97e, 04:99e-04:104e, 04:106e-04:109e,
04:111e-04:130e, 04:132e-04:137e, 04:139e-04:144e, 04:146e-04:153e,
04:155e-04:159e, 04:162e-04:169e, 04:171e-04:200e, 04:202e-04:210e,
04:212Ne-04:217e, 04:219e-04:228e, 04:230e-04:231e, 04:233e

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Cannot exclude RARE alleles from another locus.

HLA-DRB345

GROUP	ALLELES	ANTIGEN
DRB3*02	DRB3* 02:01, 02:02:01:01; DRB3* 02:02:02d, 02:11d; DRB3* 02:02:01:02e, 02:02:03e, 02:02:04e, 02:02:05e, 02:02:06e, 02:02:07e, 02:02:08e, 02:02:09e, 02:07e, 02:08e	DR52
	DRB3* 02:06d, 02:17d; DRB3* 02:04e, 02:05e, 02:12e, 02:13e, 02:14e, 02:15e, 02:16e, 02:18e, 02:19e, 02:21e, 02:22:01e, 02:22:02e, 02:23e, 02:24e, 02:25e, 02:26e, 02:28e, 02:29Ne, 02:30e, 02:31:01e, 02:31:02e, 02:32e, 02:33e, 02:34e, 02:35e, 02:36e, 02:39e, 02:40e, 02:41e, 02:43e, 02:45e, 02:46e, 02:47e, 02:48e, 02:49e, 02:51e, 02:52e, 02:53e, 02:54e, 02:55Ne, 02:56e, 02:57e, 02:59e, 02:60e, 02:61Qe, 02:62e, 02:63e, 02:64e, 02:65e	-
DRB4*01	DRB4* 01:03:01:01, 01:03:03; DRB4* 01:03:02d; DRB4* 01:01:02e, 01:03:01:03e, 01:03:04e, 01:03:05e, 01:05e	DR53
	DRB4* 01:02; DRB4* 01:04e, 01:07:01e, 01:07:02e, 01:08e, 01:09e, 01:10e, 01:11e, 01:12e, 01:13e, 01:14e, 01:15e, 01:16Ne, 01:17e, 01:18e, 01:19e, 01:20e, 01:21e, 01:22e, 01:24e, 01:25e, 01:26e, 01:27e, 01:28e, 01:29e, 01:30e, 01:31e, 01:32e, 01:33e, 01:34e, 01:35e, 01:36e, 01:37e, 01:38Ne, 01:39e, 01:40e, 01:41e, 01:42e, 01:43e, 01:44e, 01:45e, 01:46e, 01:47e, 01:48e, 01:49e, 01:50e, 01:51e, 01:52e, 01:53e, 01:54Ne, 01:55e, 01:56Ne	-

Cannot exclude RARE alleles from another locus.

HLA-DQA1

ALLELE GROUP	ALLELES	P GROUP	ANTIGEN
DQA1*03	DQA1* 03:01:01, 03:02:01:01, 03:03:01:01; DQA1* 03:01:03e, 03:02:01:02e-03:02:01:03e, 03:03:01:02e-03:04e	03:01P	-
DQA1*05	DQA1* 05:01:01:01, 05:03:01:01, 05:05:01:01, 05:08; DQA1* 05:09d; DQA1* 05:01:01:02e-05:01:02e, 05:03:01:02e, 05:05:01:02e-05:07e, 05:11e	05:01P	-
	DQA1* 05:02d; DQA1* 05:04e	-	

HLA-DQB1

ALLELE GROUP	ALLELES	P GROUP	ANTIGEN
DQB1*02	DQB1* 02:01:01, 02:02:01:01; DQB1* 02:01:02e-02:01:24e, 02:02:01:02e-02:02:04e	02:01P	DQ2
	DQB1* 02:03	-	
	DQB1* 02:04e, 02:06e, 02:09e-02:10e, 02:48e, 02:59e, 02:64e, 02:79e-02:82e, 02:89e, 02:97e-02:99e	02:01P	-
	DQB1* 02:07e	02:07P	
	DQB1* 02:14e	02:14P	
	DQB1* 02:05e, 02:08e, 02:11e-02:13e, 02:15e-02:47e, 02:49e-02:58Ne, 02:60e-02:63e, 02:65e-02:78e, 02:83e-02:88e, 02:90e-02:96Ne, 02:100e-02:101e	-	
DQB1*03	DQB1* 03:02:01:01; DQB1* 03:02:02d; DQB1* 03:02:01:02e-03:02:01:04e, 03:02:03e-03:02:04e, 03:02:07e-03:02:10e, 03:02:12e-03:02:25e	03:02P	DQ8
	DQB1* 03:32e, 03:85e, 03:190e, 03:245e, 03:247e, 03:251e, 03:263e, 03:265e	03:02P	
	DQB1* 03:14:02e	03:14P	-
	DQB1* 03:07e-03:08e, 03:11e, 03:18e, 03:37e, 03:45e, 03:62e-03:64e, 03:66Ne-03:68e, 03:70e, 03:81e, 03:106e-03:107e, 03:125e, 03:138e, 03:146e, 03:153e, 03:161e, 03:174e-03:175e, 03:178e-03:179e, 03:185e, 03:189e, 03:199e, 03:203e-03:205e, 03:210e-03:211e, 03:213Ne-03:215e, 03:223e-03:226e, 03:228e-03:229e, 03:233e, 03:237Ne, 03:240e, 03:261e, 03:269Ne	-	

HLA-DPA1

ALLELE GROUP	ALLELES	P GROUP	ANTIGEN
DPA1*01	DPA1* 01:03:01:01; DPA1* 01:03:01:02e-01:03:05e, 01:14e	01:03P	-
	DPA1* 01:06e	01:06P	
	DPA1* 01:04; DPA1* 01:05e, 01:07e, 01:09e-01:10e, 01:12e	-	
DPA1*02	DPA1* 02:01:01:01; DPA1* 02:01:01:02e-02:01:08e, 02:08e	02:01P	-
	DPA1* 02:07:01:01; DPA1* 02:02e, 02:06e, 02:07:01:02e-02:07:01:03e	02:02P	
	DPA1* 02:03e-02:05e	-	

HLA-DPB1

EPITYPE	ALLELES	P GROUP	HVR-A	HVR-B	HVR-C	HVR-D	HVR-E	HVR-F
EDP03	DPB1* 104:01:01:01d; DPB1* 03:01:02e-03:01:07e / DPB1* 104:01:01:02e-104:01:01:03e	03:01P	VYQL	EEFV	DED	LLEEK	V	DEAV
	DPB1* 111:01e / DPB1* 221:01e / DPB1* 222:01e / DPB1* 270:01e / DPB1* 293:01e / DPB1* 329:01e / DPB1* 391:01e / DPB1* 404:01e / DPB1* 405:01e / DPB1* 439:01e / DPB1* 472:01e / DPB1* 509:01e / DPB1* 548:01e / DPB1* 568:01e / DPB1* 610:01e / DPB1* 645:01e / DPB1* 664:01e	-						
EDP14	DPB1* 14:01:01:01; DPB1* 14:01:01:02e-14:01:04e / DPB1* 498:01e / DPB1* 572:01e	14:01P	VHQL	EEFV	DED	LLEEK	V	DEAV
	DPB1* 243:01e / DPB1* 383:01e / DPB1* 409:01e / DPB1* 445:01e / DPB1* 446:01e / DPB1* 492:01e / DPB1* 629:01e	-						
One side of this epitope requires a RARE allele, review results to confirm assignment. This epitope was MANUALLY chosen.								
This genotype was selected.								

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