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TEST INFO

Patient ID: **AGD4110** Sample ID: **19-027226** Kit Name: **LinkS_{eq} HLA ABCDRDQDP+**
Patient Name: **AGD4110, DECEASED** Sample Date: **04/30/2019** Kit Lot #: **K3683-CR**
Test Date: **5/1/2019** Plate 1 ID: **SX271816-APA**
Kit Exp Date: **2020-03-31**

SUMMARY

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

TEST	GENOTYPE	PHENOTYPE
HLA-A	A*02 A*29	A2 A29
HLA-B	B*57 B*58	B57 B58
HLA-DRB1	DRB1*07 DRB1*08	DR7 DR8
HLA-DQA1	DQA1*02 DQA1*04	DQA1*02 DQA1*04
HLA-DPA1	DPA1*01 DPA1*01	DPA1*01 DPA1*01

TEST	GENOTYPE	PHENOTYPE
HLA-C	C*06 C*07	Cw6 Cw7
Bw		Bw4 Bw4
HLA-DRB345	DRB4*01:03:01:02N	DR53-Null
HLA-DQB1	DQB1*03 DQB1*04	DQ9 DQ4

EPITYPE	ALLELES	HVR-A	HVR-B	HVR-C	HVR-D	HVR-E	HVR-F
EDP02	DPB1* 02:01:02:01; DPB1* 02:01:02:02e-02:01:03e, 02:01:05e-02:01:21e / DPB1* 115:01e / DPB1* 123:01e / DPB1* 141:01e / DPB1* 145:01e / DPB1* 146:01e / DPB1* 151:01e / DPB1* 155:01e / DPB1* 163:01e / DPB1* 186:01e / DPB1* 187:01e / DPB1* 191:01e / DPB1* 196:01e / DPB1* 211:01e / DPB1* 217:01e / DPB1* 237:01e / DPB1* 238:01e / DPB1* 239:01e / DPB1* 258:01e / DPB1* 261:01e / DPB1* 273:01e / DPB1* 297:01e / DPB1* 310:01e / DPB1* 339:01e / DPB1* 352:01e / DPB1* 359:01e / DPB1* 366:01e / DPB1* 367:01e / DPB1* 381:01e / DPB1* 414:01e / DPB1* 419:01e / DPB1* 421:01e / DPB1* 432:01e / DPB1* 433:01e / DPB1* 444:01e / DPB1* 457:01e / DPB1* 469:01e / DPB1* 501:01e / DPB1* 502:01e / DPB1* 510:01e / DPB1* 511:01e / DPB1* 528:01e / DPB1* 537:01e / DPB1* 557:01e / DPB1* 579:01e / DPB1* 582:01e / DPB1* 602:01e / DPB1* 604:01e / DPB1* 617:01e / DPB1* 622:01e / DPB1* 628:01e / DPB1* 637:01e / DPB1* 639:01e / DPB1* 640:01e / DPB1* 655:01e / DPB1* 656:01e / DPB1* 660:01e	LFQG	EEFV	DEE	ILEEE	M	GGPM
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
<i>One side of this epitype requires a RARE allele, review results to confirm assignment. This epitype 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 A29**
 HLA-C: **Cw6 Cw7**
 HLA-DQA1: **DQA1*02 DQA1*04**
 HLA-DPA1: **DPA1*01 DPA1*01**

HLA-B: **B57 B58**
 HLA-DRB1: **DR7 DR8**
 HLA-DQB1: **DQ9 DQ4**
 HLA-DPB1: **DPB1*02:01+
 DPB1*104:01+**

Bw: **Bw4 Bw4**
 HLA-DRB345: **DR53-Null**

NOTES

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

REVIEW

Analyzed By:	Jovanne Cierras	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, 02:246e-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-02:333e, 02:335e-02:337e,	-

	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*29	A* 29:01:01:01; A* 29:01:02e-29:01:06e, 29:01:08e-29:01:09e	29:01P	A29
	A* 29:02:01:01; A* 29:02:01:02e-29:02:21e	29:02P	
	<i>A* 29:10:01d;</i> A* 29:10:02e	29:10P	
	A* 29:16e	-	
	A* 29:01:01:02Ne, 29:08Ne	-	Null
	A* 29:26e, 29:46e, 29:75e, 29:95e, 29:100e	29:02P	-
	<i>A* 29:04d, 29:09d, 29:12d;</i> A* 29:03e, 29:05e-29:07e, 29:11e, 29:15e, 29:17e-29:18e, 29:20e-29:25e, 29:27e-29:36e, 29:38e, 29:40e-29:45e, 29:47e, 29:49e-29:55e, 29:57e-29:74e, 29:76e-29:94e, 29:96e-29:99e, 29:102e-29:103e	-	

HLA-B

ALLELE GROUP	ALLELES	P GROUP	ANTIGEN
B*57	B* 57:01:01; B* 57:01:02e-57:01:24e	57:01P	B57
	B* 57:04:01d; B* 57:04:02e	57:04P	
	B* 57:08e	-	
	B* 57:29e, 57:37e, 57:55e	57:01P	-
	B* 57:14e	57:14P	
	B* 57:67e	57:67P	
	B* 57:05d; B* 57:06e, 57:10e-57:11e, 57:13e, 57:15e-57:16e, 57:18e-57:21e, 57:23e-57:27e, 57:30e-57:36e, 57:38e, 57:40e-57:41e, 57:43e-57:44e, 57:47e-57:50e, 57:52e-57:54e, 57:56e, 57:59e-57:62e, 57:64e-57:65e, 57:68e, 57:70e, 57:72e-57:75e, 57:77e-57:79Ne, 57:81e, 57:83e, 57:85e-57:87e, 57:89e-57:90e	-	
B*58	B* 58:01:01:01; B* 58:01:01:02e-58:01:22e	58:01P	B58
	B* 58:10Ne	-	Null
	B* 58:11e, 58:51e-58:52e, 58:57e-58:58e, 58:66e, 58:71e	58:01P	-
	B* 58:16:02e	58:16P	
	B* 58:45e	58:45P	
	B* 58:59:01e	58:59P	
	B* 58:04d; B* 58:05e, 58:13e-58:15e, 58:17Ne, 58:21e-58:24e, 58:26e, 58:29e-58:33e, 58:35e-58:37e, 58:39Ne-58:42e, 58:47e-58:50e, 58:53e-58:56e, 58:61e-58:63e, 58:67e-58:70e, 58:72Ne, 58:74e-58:83e, 58:85e-58:90e	-	
This genotype was chosen as the most likely; cannot exclude one or more rare genotypes.			

	ALLELES	ANTIGEN
Bw4	B* 57:01:01 / B* 58:01:01:01; <i>B* 57:04:01d, 57:05d / B* 58:04d;</i> B* 57:01:02e-57:01:24e, 57:04:02e, 57:06e, 57:08e, 57:10e-57:11e, 57:13e-57:16e, 57:18e-57:21e, 57:23e-57:27e, 57:29e-57:38e, 57:40e-57:41e, 57:43e-57:44e, 57:47e-57:50e, 57:52e-57:56e, 57:59e-57:62e, 57:64e-57:65e, 57:67e-57:68e, 57:70e, 57:72e-57:75e, 57:77e-57:79Ne, 57:81e, 57:83e, 57:85e-57:87e, 57:89e-57:90e / B* 58:01:01:02e-58:01:22e, 58:05e, 58:10Ne-58:11e, 58:13e-58:15e, 58:16:02e-58:17Ne, 58:21e-58:24e, 58:26e, 58:29e-58:33e, 58:35e-58:37e, 58:39Ne-58:42e, 58:45e, 58:47e-58:59:01e, 58:61e-58:63e, 58:66e-58:72Ne, 58:74e-58:83e, 58:85e-58:90e	Bw4

HLA-C

ALLELE GROUP	ALLELES	P GROUP	ANTIGEN
C*06	C* 06:02:01:01; C* 06:02:01:02d; C* 06:02:01:03e-06:02:07e, 06:02:09e-06:02:26e, 06:02:28e-06:02:50e	06:02P	Cw6
	C* 06:17e, 06:55e, 06:73e, 06:83e, 06:100e, 06:110e-06:111e, 06:146e, 06:176e, 06:201e	06:02P	-
	C* 06:03:02e	06:03P	
	C* 06:04:01d; C* 06:04:02e	06:04P	
	C* 06:34:01e	06:34P	
	C* 06:42e	06:42P	
	C* 06:43e	06:43P	
	C* 06:53e	06:53P	
	C* 06:70e	06:70P	
	C* 06:76:01e	06:76P	
	C* 06:102e	06:102P	
	C* 06:106e	06:106P	
	C* 06:155e	06:155P	
	C* 06:06d-06:09d, 06:27d; C* 06:10e-06:15e, 06:18e-06:26e, 06:28e-06:30e, 06:32e-06:33e, 06:36e-06:41e, 06:44e-06:52e, 06:54e, 06:56e-06:66e, 06:68e-06:69e, 06:71e, 06:74Qe-06:75e, 06:77e-06:82e, 06:84e-06:99e, 06:103e-06:105e, 06:107e-06:109e, 06:112e-06:126e, 06:128Ne-06:131e, 06:133e-06:135e, 06:137e-06:142e, 06:145e, 06:147e-06:154e, 06:156e-06:167e, 06:169e-06:175Ne, 06:177e-06:191e, 06:193e-06:200Qe, 06:202e-06:203e	-	
C*07	C* 07:01:01:01, 07:06; C* 07:01:02d; C* 07:01:01:02e-07:01:01:13e, 07:01:01:15e-07:01:01:18e, 07:01:03e-07:01:48e, 07:01:50e-07:01:59e	07:01P	Cw7
	C* 07:02:01:01; C* 07:02:01:03d; C* 07:02:01:02e, 07:02:01:04e-07:02:08e, 07:02:10e-07:02:31e, 07:02:33e-07:02:54e, 07:02:56e-07:02:74e, 07:02:76e-07:02:80e	07:02P	
	C* 07:04:01:01; C* 07:04:01:02e-07:04:10e	07:04P	
	C* 07:38e	07:38P	
	C* 07:05d, 07:12d, 07:40d; C* 07:14e, 07:16e, 07:36e-07:37e, 07:44e-07:45e, 07:49e	-	
	C* 07:32Nd; C* 07:33Ne	-	Null
	C* 07:18; C* 07:01:01:14Qe, 07:52e, 07:153e, 07:166e, 07:337e, 07:343e, 07:419e, 07:453e, 07:458e, 07:588e, 07:591e	07:01P	-

C* 07:66d; C* 07:50e, 07:74e, 07:159e-07:160e, 07:167e, 07:245e, 07:308e, 07:348e-07:349e, 07:359e, 07:446e, 07:486e, 07:500e, 07:533e, 07:544e, 07:566e, 07:592e, 07:594e-07:596e	07:02P
C* 07:11e, 07:324e, 07:585e-07:586e	07:04P
C* 07:17:01d	07:17P
C* 07:26:01d; C* 07:26:02e	07:26P
C* 07:27:01d; C* 07:27:02e	07:27P
C* 07:29:01d	07:29P
C* 07:31e	07:31P
C* 07:43:01d; C* 07:43:02e	07:43P
C* 07:56:01d; C* 07:56:02e	07:56P
C* 07:76e	07:76P
C* 07:78e	07:78P
C* 07:108e	07:108P
C* 07:131e	07:131P
C* 07:137e	07:137P
C* 07:141:02e	07:141P
C* 07:172e	07:172P
C* 07:199e	07:199P
C* 07:204e	07:204P
C* 07:246e	07:246P
C* 07:257e	07:257P
C* 07:260e	07:260P
C* 07:314:01e, 07:314:03e	07:314P
C* 07:330e	07:330P
C* 07:341e	07:341P
C* 07:368e	07:368P
C* 07:441e	07:441P
C* 07:454e	07:454P
C* 07:07d, 07:10d, 07:13d, 07:19d, 07:21d-07:22d, 07:24d-07:25d, 07:35d, 07:46d, 07:60d-07:61Nd, 07:67d, 07:72d, 07:104Nd; C* 07:03e, 07:08e-07:09e, 07:15e, 07:20e, 07:23e, 07:28e, 07:39e, 07:42e, 07:47e-07:48e, 07:51e, 07:53e-07:55Ne, 07:57e-07:59e, 07:62e-07:65e, 07:68e-07:71e, 07:73e, 07:75e, 07:77e, 07:79e-07:94e, 07:97e-07:100e, 07:102e-07:103e, 07:105e-07:107e, 07:109e-07:130e, 07:132e-07:136e, 07:138e-07:139e, 07:142e-07:147e, 07:149e-07:152Ne, 07:154e-07:158e,	-

07:162e-07:164Ne, 07:168e-07:171e, 07:173e-07:198Ne, 07:200e-07:203e,
07:205e-07:240e, 07:243e-07:244e, 07:247e-07:256e, 07:258e-07:259e,
07:261e-07:264Ne, 07:266e-07:303e, 07:305e-07:306e, 07:309e-07:313e,
07:315e-07:323e, 07:325e-07:329Ne, 07:331e-07:336e, 07:338e-07:340e,
07:344e-07:346e, 07:350Ne-07:358e, 07:360e-07:367e, 07:369e-07:392e,
07:394e-07:418e, 07:420e-07:440e, 07:442e-07:445e, 07:448e-07:452Ne,
07:455e-07:457e, 07:459e-07:485e, 07:488e-07:499e, 07:501e-07:511e,
07:513Qe-07:532e, 07:534e-07:543e, 07:545e-07:565e, 07:567e-07:577e,
07:579e-07:582Qe, 07:584e, 07:587e, 07:589e-07:590e, 07:593Ne, 07:597e-07:598e

This genotype was chosen as the most likely; cannot exclude one or more rare genotypes.

HLA-DR

HLA-DRB1

ALLELE GROUP	ALLELES	P GROUP	ANTIGEN
DRB1*07	DRB1* 07:01:01:01; DRB1* 07:01:01:02e-07:01:21e	07:01P	DR7
	DRB1* 07:03d; DRB1* 07:04e, 07:09e	-	
	DRB1* 07:10Ne	-	Null
	DRB1* 07:34e, 07:72e, 07:79e	07:01P	-
	DRB1* 07:05d, 07:07d, 07:11d, 07:13d; DRB1* 07:06e, 07:08e, 07:12e, 07:14e-07:33e, 07:35e-07:49e, 07:51e-07:71e, 07:73e-07:78e, 07:80e	-	
DRB1*08	DRB1* 08:02:02e	08:02P	DR8
	DRB1* 08:04:01, 08:04:04; DRB1* 08:04:03e, 08:04:05e-08:04:07e	08:04P	
	DRB1* 08:24:01e	08:24P	-
	DRB1* 08:30:01e-08:30:02e	08:30P	
	DRB1* 08:59e, 08:67e	-	
This genotype was chosen as the most likely; cannot exclude one or more rare genotypes.			

HLA-DRB345

GROUP	ALLELES	ANTIGEN
DRB4*01:03: 01:02N	DRB4* 01:03:01:02N	Null

HLA-DQA1

ALLELE GROUP	ALLELES	P GROUP	ANTIGEN
DQA1*02	DQA1* 02:01:01:01; DQA1* 02:01:01:02e-02:01:02e	02:01P	-
DQA1*04	DQA1* 04:01:01:01; DQA1* 04:01:01:02e-04:02e, 04:04e	04:01P	-
	DQA1* 04:03Ne	-	

HLA-DQB1

ALLELE GROUP	ALLELES	P GROUP	ANTIGEN
DQB1*03	DQB1* 03:01:13e, 03:01:15e, 03:01:21e, 03:01:25e	03:01P	DQ7
	DQB1* 03:02:06e, 03:02:18e	03:02P	DQ8
	DQB1* 03:10e	03:10P	
	DQB1* 03:03:02:01; DQB1* 03:03:02:02e-03:03:15e	03:03P	DQ9
	DQB1* 03:19:02e	03:01P	-
	DQB1* 03:31e, 03:33e, 03:39e, 03:43e, 03:79e, 03:87e-03:89e, 03:91Qe, 03:96e-03:98e, 03:117e, 03:222e, 03:248e-03:249e	03:03P	
	DQB1* 03:195e	03:10P	
	DQB1* 03:08e, 03:12e, 03:15e-03:16e, 03:20e, 03:26e, 03:30e, 03:34e, 03:38e, 03:40e-03:41e, 03:55e, 03:60e, 03:65e, 03:77e, 03:86e, 03:90Ne, 03:95Ne, 03:99Qe, 03:101e, 03:103e-03:105e, 03:107e-03:108e, 03:110e-03:112e, 03:123e-03:126e, 03:130e, 03:133e, 03:136e-03:137e, 03:141e, 03:145e, 03:149e, 03:153e, 03:155e-03:156e, 03:161e, 03:168e, 03:172e, 03:176e-03:177e, 03:180e, 03:183e, 03:186e-03:187e, 03:200e, 03:202e, 03:205e, 03:209e, 03:212e, 03:214e, 03:217e, 03:227e-03:228e, 03:230e, 03:234e-03:235e, 03:238e-03:239e, 03:254e, 03:258e, 03:261e	-	
DQB1*04	DQB1* 04:01:01:01; DQB1* 04:01:01:02e-04:01:05e	04:01P	DQ4
	DQB1* 04:02:01:01; DQB1* 04:02:01:02e-04:02:01:03e, 04:02:03e-04:02:14e	04:02P	
	DQB1* 04:07e-04:08e, 04:17e	04:01P	-
	DQB1* 04:13e, 04:23e, 04:39e	04:02P	
	DQB1* 04:03:01e	04:03P	
	DQB1* 04:04e-04:06e, 04:10e-04:12e, 04:14e-04:16e, 04:18e-04:22e, 04:24e-04:38e, 04:40e-04:41Ne	-	

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	-	

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	-	

HLA-DPB1

EPITYPE	ALLELES	P GROUP	HVR-A	HVR-B	HVR-C	HVR-D	HVR-E	HVR-F
EDP02	DPB1* 02:01:02:01; DPB1* 02:01:02:02e-02:01:03e, 02:01:05e-02:01:21e / DPB1* 141:01e / DPB1* 352:01e / DPB1* 414:01e / DPB1* 617:01e / DPB1* 640:01e	02:01P	LFQG	EEFV	DEE	ILEEE	M	GGPM
	DPB1* 155:01e	155:01P						
	DPB1* 115:01e / DPB1* 123:01e / DPB1* 145:01e / DPB1* 146:01e / DPB1* 151:01e / DPB1* 163:01e / DPB1* 186:01e / DPB1* 187:01e / DPB1* 191:01e / DPB1* 196:01e / DPB1* 211:01e / DPB1* 217:01e / DPB1* 237:01e / DPB1* 238:01e / DPB1* 239:01e / DPB1* 258:01e / DPB1* 261:01e / DPB1* 273:01e / DPB1* 297:01e / DPB1* 310:01e / DPB1* 339:01e / DPB1* 359:01e / DPB1* 366:01e / DPB1* 367:01e / DPB1* 381:01e / DPB1* 419:01e / DPB1* 421:01e / DPB1* 432:01e / DPB1* 433:01e / DPB1* 444:01e / DPB1* 457:01e / DPB1* 469:01e / DPB1* 501:01e / DPB1* 502:01e / DPB1* 510:01e / DPB1* 511:01e / DPB1* 528:01e / DPB1* 537:01e / DPB1* 557:01e / DPB1* 579:01e / DPB1* 582:01e / DPB1* 602:01e / DPB1* 604:01e / DPB1* 622:01e / DPB1* 628:01e / DPB1* 637:01e / DPB1* 639:01e / DPB1* 655:01e / DPB1* 656:01e / DPB1* 660:01e	-						
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	-						

*One side of this epitope requires a RARE allele, review results to confirm assignment.
This epitope was MANUALLY chosen.*

EPITYPE	ALLELES	P GROUP	HVR-A	HVR-B	HVR-C	HVR-D	HVR-E	HVR-F
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