

Jewish Hospital Histocompatibility Laboratory
 200 Abraham Flexner Way
 Louisville, KY 40202
 Phone: 502-587-4373 / Fax: 502-587-4504
 Tiffany K. Roberts, PhD, DABCC, DABHI, Director

TEST INFO

Patient ID: AGDX065	Sample ID: 19-027142	Kit Name: LinkS[®]q HLA ABCDRDQDP+
Patient Name: AGDX065, DECEASED	Sample Date: 04/24/2019	Kit Lot #: K3683-CR
Test Date: 4/25/2019		Plate 1 ID: SX271816-APE
		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*24	A2 A24	HLA-C	C*02 C*03	Cw2 Cw9
HLA-B	B*15 B*15	B62 B72	Bw		Bw6 Bw6
HLA-DRB1	DRB1*13 DRB1*13	DR13 DR13	HLA-DRB345	DRB3*01 DRB3*03	DR52 DR52
HLA-DQA1	DQA1*01 DQA1*05	DQA1*01 DQA1*05	HLA-DQB1	DQB1*03 DQB1*06	DQ7 DQ6
HLA-DPA1	DPA1*01 DPA1*02	DPA1*01 DPA1*02			

EPITYPE	ALLELES	HVR-A	HVR-B	HVR-C	HVR-D	HVR-E	HVR-F
EDP01	DPB1* 01:01:01:01, 01:01:02:01; DPB1* 01:01:01:02e-01:01:01:04e, 01:01:02:02e-01:01:04e, 01:01:06e / DPB1* 118:01e / DPB1* 127:01e / DPB1* 159:01Ne / DPB1* 162:01e / DPB1* 220:01e / DPB1* 267:01e / DPB1* 326:01e / DPB1* 327:01e / DPB1* 346:01e / DPB1* 417:01e / DPB1* 481:01e / DPB1* 483:01e / DPB1* 542:01e / DPB1* 543:01e / DPB1* 616:01e / DPB1* 632:01e / DPB1* 667:01e	VYQG	EEYA	AAE	ILEEK	V	DEAV

TEST	GENOTYPE	PHENOTYPE
HLA-A	A*02 A*24	A2 A24
HLA-B	B*15 B*15	B62 B72
HLA-DRB1	DRB1*13 DRB1*13	DR13 DR13
HLA-DQA1	DQA1*01 DQA1*05	DQA1*01 DQA1*05
HLA-DPA1	DPA1*01 DPA1*02	DPA1*01 DPA1*02

TEST	GENOTYPE	PHENOTYPE
HLA-C	C*02 C*03	Cw2 Cw9
Bw		Bw6 Bw6
HLA-DRB345	DRB3*01 DRB3*03	DR52 DR52
HLA-DQB1	DQB1*03 DQB1*06	DQ7 DQ6

EPITYPE	ALLELES	HVR-A	HVR-B	HVR-C	HVR-D	HVR-E	HVR-F
EDP01	DPB1* 01:01:01:01, 01:01:02:01; DPB1* 01:01:01:02e-01:01:01:04e, 01:01:02:02e-01:01:04e, 01:01:06e / DPB1* 118:01e / DPB1* 127:01e / DPB1* 159:01Ne / DPB1* 162:01e / DPB1* 220:01e / DPB1* 267:01e / DPB1* 326:01e / DPB1* 327:01e / DPB1* 346:01e / DPB1* 417:01e / DPB1* 481:01e / DPB1* 483:01e / DPB1* 542:01e / DPB1* 543:01e / DPB1* 616:01e / DPB1* 632:01e / DPB1* 667:01e	VYQG	EEYA	AAE	ILEEK	V	DEAV
EDP04	DPB1* 04:01:01:01; DPB1* 04:01:01:02e-04:01:12e, 04:01:14e-04:01:37e / DPB1* 99:01e / DPB1* 120:01Ne / DPB1* 121:01e / DPB1* 128:01e / DPB1* 134:01e / DPB1* 149:01e / DPB1* 169:01e / DPB1* 174:01e / DPB1* 175:01e / DPB1* 180:01e / DPB1* 181:01e / DPB1* 192:01e / DPB1* 194:01e / DPB1* 195:01e / DPB1* 212:01e / DPB1* 213:01e / DPB1* 224:01e / DPB1* 225:01e / DPB1* 228:01e / DPB1* 231:01e / DPB1* 232:01e / DPB1* 240:01e / DPB1* 253:01e / DPB1* 255:01e / DPB1* 262:01e / DPB1* 272:01e / DPB1* 275:01e / DPB1* 276:01e / DPB1* 281:01e / DPB1* 282:01e / DPB1* 283:01e / DPB1* 298:01e / DPB1* 320:01e / DPB1* 323:01e / DPB1* 334:01e / DPB1* 335:01e / DPB1* 336:01e / DPB1* 341:01e / DPB1* 350:01e / DPB1* 356:01e / DPB1* 360:01e / DPB1* 372:01e / DPB1* 376:01e / DPB1* 378:01e / DPB1* 396:01e / DPB1* 397:01e / DPB1* 415:01e / DPB1* 418:01e / DPB1* 425:01e / DPB1* 426:01e / DPB1* 428:01e / DPB1* 434:01e / DPB1* 453:01e / DPB1* 455:01Ne / DPB1* 459:01e / DPB1* 464:01e / DPB1* 465:01e / DPB1* 468:01e / DPB1* 475:01e / DPB1* 476:01e / DPB1* 479:01e / DPB1* 485:01e / DPB1* 486:01e / DPB1* 487:01e / DPB1* 497:01e / DPB1* 500:01e / DPB1* 520:01e / DPB1* 521:01e / DPB1* 522:01e / DPB1* 523:01e / DPB1* 524:01e / DPB1* 529:01e / DPB1* 534:01e / DPB1* 553:01e / DPB1* 554:01e / DPB1* 556:01e / DPB1* 559:01e / DPB1* 569:01e / DPB1* 575:01e / DPB1* 578:01e / DPB1* 583:01e / DPB1* 591:01e / DPB1* 593:01e / DPB1* 607:01e / DPB1* 614:01e / DPB1* 615:01e / DPB1* 618:01e / DPB1* 625:01e / DPB1* 643:01e / DPB1* 658:01e / DPB1* 666:01e / DPB1* 670:01e / DPB1* 677:01e / DPB1* 682:01e / DPB1* 683:01e / DPB1* 694:01e / DPB1* 699:01e	LFQG	EEFA	AAE	ILEEK	M	GGPM

This epitope was AUTOMATICALLY chosen because it is the only one which does not require a rare allele.

(Notice: Cannot exclude other combinations. Review all results.)
All test results are based on IMGT/HLA release: version 3.33.0 - Jul 2018

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

LABORATORY ASSIGNMENT

HLA-A: **A2 A24**
HLA-C: **Cw2 Cw9**
HLA-DQA1: **DQA1*01 DQA1*05**
HLA-DPA1: **DPA1*01 DPA1*02**

HLA-B: **B62 B72**
HLA-DRB1: **DR13 DR13**
HLA-DQB1: **DQ7 DQ6**
HLA-DPB1: **DPB1*01:01+
DPB1*04:01+**

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

NOTES

The + sign indicates the presence of additional alleles of DPB1* that cannot be ruled out. The detailed report can be found in the attachment section in UNET.

REVIEW

Analyzed By:

Jovanne Cierras

Signature:

Date:

Reviewed By:

Signature:

Date:

ALLELE GROUP	ALLELES	P GROUP	ANTIGEN
A*02	A* 02:01:01:01, 02:01:04, 02:09:01:01; 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-02:01:144e, 02:09:01:02e, 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-02:05:07e	02:05P	
	A* 02:06:01:01; A* 02:06:01:02e-02:06:06e, 02:06:08e-02:06:11e, 02:06:13e-02:06:23e	02:06P	
	A* 02:07:01; A* 02:07:02e-02:07:11e	02:07P	
	A* 02:11:01:01; A* 02:11:01:02e, 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, 02:704e, 02:716e, 02:719e-02:720e, 02:722e, 02:724e, 02:726e, 02:739e-02:740e	02:01P	-
	A* 02:717e	02:02P	
	A* 02:664e	02:04P	

A* 02:179e, 02:324e	02:05P
A* 02:126e, 02:428e, 02:625e, 02:718e, 02:737e	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
A* 02:81e, 02:124e	02:81P
<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, 02:87d, 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-02:112e, 02:115e-02:116e, 02:118e, 02:120e-02:121e, 02:127e-02:128e, 02:130e, 02:133e, 02:136e, 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-02:703e, 02:705e-02:710Ne, 02:712e-02:715Ne, 02:721e, 02:725e, 02:727e-02:736e, 02:738e		
A*24	A* 24:05:01d; A* 24:05:02e	24:05P	A9
	A* 24:19e	-	
	A* 24:02:01:01-24:02:01:02L; A* 24:02:02d; A* 24:02:01:03e-24:02:01:16e, 24:02:04e-24:02:109e, 24:76e	24:02P	A24
	A* 24:07:01; A* 24:07:02e	24:07P	
	A* 24:13:01d; A* 24:13:02e	24:13P	
	A* 24:14:01:01d; A* 24:14:01:02e-24:14:01:03e	24:14P	
	A* 24:20:01:01; A* 24:20:01:02e	24:20P	
	A* 24:21e	24:21P	
	A* 24:17; A* 24:04d, 24:06d, 24:37d, 24:43d, 24:58d; A* 24:27e-24:28e, 24:78e	-	
	A* 24:23d	-	A2403
	A* 24:11Nd; A* 24:40Ne, 24:45Ne, 24:48Ne, 24:60Ne	-	Null
	A* 24:02:03Qe, 24:79e, 24:144e, 24:150e, 24:153e-24:154e, 24:231e, 24:249e-24:251e, 24:263e-24:271e, 24:352e-24:354e, 24:383e, 24:385e, 24:400e-24:402e	24:02P	-
	A* 24:199e	24:05P	
	A* 24:26d; A* 24:314e	24:26P	
	A* 24:74e	24:74P	
	A* 24:135e	24:135P	
	A* 24:142e	24:142P	
	A* 24:172e	24:172P	
	A* 24:225e	24:225P	

A* 24:226e	24:226P
A* 24:313e	24:313P
A* 24:347e	24:347P
A* 24:25; <i>A* 24:15d, 24:30d-24:32d, 24:35d, 24:38d, 24:47d, 24:53d, 24:56d, 24:64d, 24:72d, 24:81d, 24:90:01Nd, 24:95d;</i> A* 24:34e, 24:39e, 24:41e, 24:44e, 24:46e, 24:49e-24:52e, 24:54e-24:55e, 24:59e, 24:61e-24:63e, 24:66e, 24:68e-24:70e, 24:73e, 24:75e, 24:77e, 24:80e, 24:83Ne-24:88e, 24:90:02Ne-24:91e, 24:93e, 24:96e-24:103e, 24:105e-24:119e, 24:121e-24:123e, 24:126e-24:128e, 24:130e-24:134e, 24:137e, 24:139e-24:141e, 24:143e, 24:145e-24:149e, 24:151e-24:152e, 24:155Ne, 24:157e-24:166e, 24:168e-24:171e, 24:173e-24:176e, 24:178e-24:189e, 24:192e-24:198e, 24:200e-24:203e, 24:205e-24:206e, 24:208e-24:209e, 24:212e-24:224e, 24:227e-24:228e, 24:230e, 24:232Ne-24:242e, 24:244e-24:248e, 24:252Ne-24:262e, 24:272e-24:288e, 24:291e-24:298e, 24:301e-24:308e, 24:311e-24:312Ne, 24:316e-24:338e, 24:341e, 24:343e-24:346e, 24:348e-24:351e, 24:356e-24:358e, 24:360e-24:366e, 24:368e-24:373e, 24:375e-24:380e, 24:382e, 24:384e, 24:386e, 24:388Ne, 24:390e-24:391e, 24:393e, 24:395e-24:399e, 24:403e-24:405e	-

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

ALLELE GROUP	ALLELES	P GROUP	ANTIGEN
B*15	B* 15:78e	15:78P	B15
	<i>B* 15:33d</i>	-	
	B* 15:01:01:01; B* 15:01:01:03e-15:01:01:15e, 15:01:03e-15:01:43e, 15:102e	15:01P	B62
	B* 15:04:02e	15:04P	
	<i>B* 15:05:01d;</i> B* 15:05:02e-15:05:03e	15:05P	
	<i>B* 15:27:01d;</i> B* 15:27:02e-15:27:04e	15:27P	
	<i>B* 15:28d</i>	15:28P	
	B* 15:32:01; B* 15:32:02e	15:32P	
	B* 15:39:01; B* 15:39:02e	15:39P	
	B* 15:34-15:35; <i>B* 15:06d, 15:58d, 15:71d, 15:82d;</i> B* 15:70e, 15:84e, 15:96e, 15:107e	-	
	<i>B* 15:01:01:02Nd;</i> B* 15:26Ne, 15:79Ne, 15:94Ne, 15:111Ne	-	Null
	B* 15:104e, 15:140e, 15:146e, 15:201e, 15:227e-15:228e, 15:247e, 15:320e-15:321Qe, 15:441e, 15:443e	15:01P	-
	B* 15:428e	15:28P	
	<i>B* 15:40:01d;</i> B* 15:40:02e	15:40P	
	B* 15:179e	15:179P	
	B* 15:251e	15:251P	
	B* 15:349e	15:349P	
	B* 15:363e	15:363P	
	<i>B* 15:56d, 15:63d, 15:65d, 15:75d, 15:113d, 15:125d, 15:141d;</i> B* 15:50e, 15:57e, 15:60e, 15:66e, 15:81e, 15:92e, 15:97e, 15:105e, 15:109e-15:110e, 15:116e-15:118e, 15:120e, 15:122e, 15:128e-15:129e, 15:135e-15:136e, 15:142e, 15:145e, 15:147e, 15:152e, 15:159e-15:160e, 15:163e-15:167e, 15:169e, 15:171e-15:172e, 15:174e-15:175e, 15:178e, 15:181Ne-15:184e, 15:187e-15:188e, 15:190Ne, 15:192e-15:193e, 15:195e, 15:199e, 15:203e, 15:205e-15:206e, 15:211e, 15:217e-15:219e, 15:225e, 15:231e-15:234e, 15:236e-15:237e, 15:244e-15:245Qe, 15:248e-15:249e, 15:257e-15:258Ne, 15:260e-15:262Ne, 15:264e, 15:267e, 15:269e, 15:272Ne, 15:276e, 15:279e-15:280e, 15:285e-15:289e, 15:295e-15:296e, 15:299e-15:300e, 15:309e, 15:315e-15:318e, 15:322e, 15:326e-15:327e, 15:332e-15:334e, 15:340e, 15:343e-15:344e, 15:346e-15:348e, 15:352e-15:353e, 15:355e, 15:359e, 15:365e, 15:370e-15:373e, 15:375Ne, 15:377Qe, 15:381e, 15:385e-15:387e, 15:390e-15:392e, 15:395e, 15:398e, 15:400Ne-15:401e, 15:406e, 15:409e-15:410e, 15:412e-15:413e, 15:415e-15:417e, 15:419e, 15:422e, 15:429e-15:430e, 15:432e, 15:440e	-	

B*15	B* 15:68e	-	B35
	B* 15:103e	15:03P	B70
	B* 15:03:01:01; B* 15:03:01:02e-15:03:07e	15:03P	B72
	B* 15:220e, 15:444e	15:03P	-
	B* 15:47:01d; B* 15:47:02e	15:47P	
	B* 15:123e, 15:151e	15:123P	
	B* 15:242:01e	15:242P	
	B* 15:54d, 15:132d; B* 15:49e, 15:74e, 15:98e, 15:127e, 15:156e, 15:158e, 15:173e, 15:210e, 15:235e, 15:253e, 15:259e, 15:266e, 15:274e, 15:281e-15:282e, 15:369e, 15:379e, 15:389e, 15:448e	-	
This genotype was chosen as the most likely; cannot exclude one or more rare genotypes.			

	ALLELES	ANTIGEN
Bw6	B* 15:01:01:01, 15:03:01:01, 15:32:01, 15:34-15:35, 15:39:01; <i>B* 15:01:01:02Nd, 15:05:01d, 15:06d, 15:27:01d, 15:28d, 15:33d, 15:40:01d, 15:47:01d, 15:54d, 15:56d, 15:58d, 15:63d, 15:65d, 15:71d, 15:75d, 15:82d, 15:113d, 15:125d, 15:132d, 15:141d;</i> B* 15:01:01:03e-15:01:01:15e, 15:01:03e-15:01:43e, 15:03:01:02e-15:03:07e, 15:04:02e, 15:05:02e-15:05:03e, 15:26Ne, 15:27:02e-15:27:04e, 15:32:02e, 15:39:02e, 15:40:02e, 15:47:02e, 15:49e-15:50e, 15:57e, 15:60e, 15:66e, 15:68e, 15:70e, 15:74e, 15:78e-15:79Ne, 15:81e, 15:84e, 15:92e, 15:94Ne, 15:96e-15:98e, 15:102e-15:105e, 15:107e, 15:109e-15:111Ne, 15:116e-15:118e, 15:120e, 15:122e-15:123e, 15:127e-15:129e, 15:135e-15:136e, 15:140e, 15:142e, 15:145e-15:147e, 15:151e-15:152e, 15:156e, 15:158e-15:160e, 15:163e-15:167e, 15:169e, 15:171e-15:175e, 15:178e-15:179e, 15:181Ne-15:184e, 15:187e-15:188e, 15:190Ne, 15:192e-15:193e, 15:195e, 15:199e, 15:201e, 15:203e, 15:205e-15:206e, 15:210e-15:211e, 15:217e-15:220e, 15:225e, 15:227e-15:228e, 15:231e-15:237e, 15:242:01e, 15:244e-15:245Qe, 15:247e-15:249e, 15:251e, 15:253e, 15:257e-15:262Ne, 15:264e, 15:266e-15:267e, 15:269e, 15:272Ne, 15:274e, 15:276e, 15:279e-15:282e, 15:285e-15:289e, 15:295e-15:296e, 15:299e-15:300e, 15:309e, 15:315e-15:318e, 15:320e-15:322e, 15:326e-15:327e, 15:332e-15:334e, 15:340e, 15:343e-15:344e, 15:346e-15:349e, 15:352e-15:353e, 15:355e, 15:359e, 15:363e, 15:365e, 15:369e-15:373e, 15:375Ne, 15:379e, 15:381e, 15:385e-15:387e, 15:389e-15:392e, 15:395e, 15:398e, 15:400Ne-15:401e, 15:406e, 15:409e-15:410e, 15:412e-15:413e, 15:415e-15:417e, 15:419e, 15:422e, 15:428e-15:430e, 15:432e, 15:440e-15:441e, 15:443e-15:444e, 15:448e	Bw6

HLA-C

ALLELE GROUP	ALLELES	P GROUP	ANTIGEN
C*02	C* 02:02:02:01, 02:10:01:01; <i>C* 02:02:01d;</i> C* 02:02:02:02e-02:02:12e, 02:02:14e-02:02:28e, 02:02:30e-02:02:40e, 02:10:01:02e-02:10:03e	02:02P	Cw2
	<i>C* 02:08d</i>	-	
	C* 02:29e, 02:69e-02:70e, 02:83e, 02:106e, 02:138e	02:02P	-
	C* 02:05:02e-02:05:03e	02:05P	
	<i>C* 02:14:01d;</i> C* 02:14:02e	02:14P	
	C* 02:26:02e-02:26:03e	02:26P	
	C* 02:36e	02:36P	
	C* 02:40e	02:40P	
	C* 02:53e	02:53P	
	<i>C* 02:04d, 02:07d, 02:19d;</i> C* 02:09e, 02:11e-02:12e, 02:15e, 02:20e-02:25Qe, 02:30e-02:31e, 02:33e-02:35e, 02:37e-02:39e, 02:42e, 02:44e-02:46e, 02:48e, 02:50e, 02:52Ne, 02:54e, 02:56e-02:57e, 02:59e-02:64e, 02:66e-02:68e, 02:71e-02:82e, 02:84e-02:86e, 02:88e-02:105Ne, 02:108e-02:114e, 02:116e-02:130e, 02:132e-02:133e, 02:136e, 02:139e-02:140e	-	

ALLELE GROUP	ALLELES	P GROUP	ANTIGEN
C*03	C* 03:11e	03:11P	Cw3
	C* 03:03:01:01, 03:03:04; C* 03:03:01:02e-03:03:03e, 03:03:05e-03:03:31e, 03:03:33e-03:03:43e	03:03P	Cw9
	C* 03:20Ne	-	Null
	C* 03:62e, 03:171e, 03:205e-03:207e, 03:227e, 03:237e, 03:312e, 03:327e, 03:341e, 03:357e, 03:370e, 03:372e, 03:378e, 03:383e	03:03P	-
	C* 03:13e	03:13P	
	C* 03:18e	03:18P	
	C* 03:43:01e	03:43P	
	C* 03:165e	03:165P	
	C* 03:88d; C* 03:22Qe, 03:30e-03:31e, 03:49e-03:50e, 03:52e-03:53e, 03:56e, 03:59e, 03:61e, 03:66e, 03:68e-03:69e, 03:75e-03:76e, 03:79e, 03:81e, 03:83e, 03:85e, 03:96e-03:97e, 03:103e, 03:112e, 03:120e, 03:122e, 03:124e, 03:126e-03:127e, 03:132e-03:133e, 03:141e, 03:144e, 03:150e-03:152e, 03:158e, 03:160e, 03:168e, 03:175e-03:177e, 03:182e, 03:185e, 03:187e-03:189Ne, 03:192e, 03:195e-03:196e, 03:202e-03:204e, 03:214e, 03:217e, 03:223e, 03:228e-03:231e, 03:241e-03:243e, 03:253e-03:254e, 03:262e, 03:273e-03:276e, 03:284e-03:285e, 03:288e-03:291e, 03:295e, 03:304e, 03:308e, 03:316Ne, 03:319e-03:321e, 03:324e-03:325e, 03:336e, 03:339e, 03:345e, 03:351e-03:352e, 03:356e, 03:360e, 03:363Ne-03:364e, 03:367e, 03:374e-03:375e, 03:377Ne, 03:380Ne, 03:389e	-	

HLA-DR

HLA-DRB1

ALLELE GROUP	ALLELES	P GROUP	ANTIGEN
DRB1*13	DRB1* 13:01:01:01; <i>DRB1* 13:01:03d;</i> DRB1* 13:01:01:02e-13:01:02e, 13:01:04e-13:01:22e	13:01P	DR13
	DRB1* 13:02:01:01; DRB1* 13:02:01:02e-13:02:15e	13:02P	
	DRB1* 13:03:01; <i>DRB1* 13:03:02d;</i> DRB1* 13:03:03e-13:03:07e	13:03P	
	DRB1* 13:05:01; DRB1* 13:05:02e-13:05:03e	13:05P	
	DRB1* 13:07:02; <i>DRB1* 13:07:01d</i>	13:07P	
	<i>DRB1* 13:11:01d;</i> DRB1* 13:11:02e	13:11P	
	DRB1* 13:12:01; DRB1* 13:12:02e-13:12:04e	13:12P	
	DRB1* 13:14:01; DRB1* 13:14:02e-13:14:03e	13:14P	
	DRB1* 13:66e	13:66P	
	DRB1* 13:04, 13:10, 13:20; <i>DRB1* 13:06d, 13:08d, 13:16d, 13:19d, 13:22d, 13:29d, 13:36d, 13:42d;</i> DRB1* 13:52e, 13:57e	-	
	DRB1* 13:54e	-	DR14
	DRB1* 13:117e, 13:190e, 13:215e, 13:233e, 13:238e, 13:251e, 13:256e, 13:261e	13:01P	-
	DRB1* 13:208e, 13:236e, 13:239e	13:02P	
	DRB1* 13:227e, 13:253e	13:03P	
	DRB1* 13:21e	13:21P	
	DRB1* 13:23e	13:23P	
	DRB1* 13:50e	13:50P	
	DRB1* 13:89e	13:89P	
	DRB1* 13:97e	13:97P	
	DRB1* 13:171e	13:171P	
	DRB1* 13:242e	13:242P	
	<i>DRB1* 13:25d, 13:31d, 13:37d-13:40d, 13:49d, 13:56d, 13:59d-13:60d, 13:76d, 13:81d-13:82d;</i> DRB1* 13:24e, 13:28e, 13:30e, 13:32e, 13:34e-13:35e, 13:46e, 13:48e, 13:51e, 13:58e, 13:62e-13:65e, 13:68e-13:70e, 13:72e-13:75e, 13:77e-13:80e, 13:83e-13:84e, 13:87e-13:88e, 13:90e-13:93e, 13:95e, 13:98e-13:103e, 13:105e-13:115e, 13:118e, 13:120e-13:128e, 13:130e-13:143e, 13:145e-13:153e, 13:155e, 13:157e, 13:160e-13:163e, 13:165e-13:170e, 13:172e-13:174e, 13:177e, 13:180e-13:182e, 13:184e-13:189e, 13:194e, 13:197e, 13:199e-13:205e, 13:207e, 13:209e-13:213e, 13:216e, 13:218e-13:226e, 13:228e-13:231e, 13:234e, 13:237e,	-	

	13:240e-13:241e, 13:243e-13:247e, 13:249Ne-13:250e, 13:252Ne, 13:254e-13:255Ne, 13:257e-13:260e		
DRB1*13	DRB1* 13:03:01; DRB1* 13:03:02d; DRB1* 13:03:03e-13:03:07e	13:03P	DR13
	DRB1* 13:07:02; DRB1* 13:07:01d	13:07P	
	DRB1* 13:11:01d; DRB1* 13:11:02e	13:11P	
	DRB1* 13:12:01; DRB1* 13:12:02e-13:12:04e	13:12P	
	DRB1* 13:14:01; DRB1* 13:14:02e-13:14:03e	13:14P	
	DRB1* 13:66e	13:66P	
	DRB1* 13:04; DRB1* 13:22d	-	
	DRB1* 13:54e	-	DR14
	DRB1* 13:227e, 13:253e	13:03P	-
	DRB1* 13:21e	13:21P	
	DRB1* 13:23e	13:23P	
	DRB1* 13:50:01e	13:50P	
	DRB1* 13:89e	13:89P	
	DRB1* 13:97:02e	13:97P	
	DRB1* 13:25d, 13:37d-13:38d, 13:49d, 13:81d-13:82d; DRB1* 13:24e, 13:30e, 13:46e, 13:48e, 13:58e, 13:62e, 13:70e, 13:75e, 13:88e, 13:90e, 13:95e, 13:100e-13:101e, 13:108e, 13:115e, 13:118e, 13:122e, 13:133e-13:134e, 13:149e-13:152e, 13:161e-13:162e, 13:167e, 13:169e, 13:172e, 13:180e, 13:188e, 13:194e, 13:197e, 13:204e, 13:219e, 13:224e, 13:228e-13:231e, 13:246e-13:247e	-	
This genotype was chosen as the most likely; cannot exclude one or more rare genotypes.			

HLA-DRB345

GROUP	ALLELES	ANTIGEN
DRB3*01	<i>DRB3* 01:01:02:01</i> ; <i>DRB3* 01:01:02:02e, 01:01:03e, 01:01:04e, 01:01:05e, 01:01:06e, 01:01:07e, 01:01:08e, 01:06e, 01:07e, 01:10e</i>	DR52
	<i>DRB3* 01:02d, 01:03d</i> ; <i>DRB3* 01:04e, 01:05e, 01:08e, 01:09e, 01:11e, 01:12e, 01:13e, 01:15e, 01:16e, 01:17e, 01:18e, 01:19e, 01:20e, 01:21e, 01:22e, 01:23e, 01:24e, 01:26Ne, 01:27e, 01:28e, 01:29e, 01:30e, 01:32e, 01:33e, 01:34e, 01:35e, 01:36e, 01:37e, 01:38e, 01:39e, 01:40:01Ne, 01:40:02Ne, 01:43e, 01:44e, 01:45e, 01:46e, 01:47e, 01:48e</i>	-
DRB3*03	<i>DRB3* 03:01:01</i> ; <i>DRB3* 03:01:02e, 03:01:03e, 03:01:04e, 03:01:05e, 03:02e</i>	DR52
	<i>DRB3* 03:03e, 03:04e, 03:05e, 03:06e, 03:07e, 03:08e, 03:09e, 03:11e, 03:12e, 03:13e, 03:14e, 03:15e, 03:16e, 03:18e</i>	-

Cannot exclude RARE alleles from another locus.

HLA-DQA1

ALLELE GROUP	ALLELES	P GROUP	ANTIGEN
DQA1*01	<i>DQA1* 01:01:01:01, 01:01:02, 01:04:01:01, 01:05:01</i> ; <i>DQA1* 01:01:01:02e-01:01:01:05e, 01:01:03e, 01:04:01:02e-01:04:02e, 01:05:02e, 01:12e</i>	01:01P	-
	<i>DQA1* 01:02:01:01</i> ; <i>DQA1* 01:02:02d</i> ; <i>DQA1* 01:02:01:02e-01:02:01:09e, 01:02:03e-01:02:04e, 01:08e-01:09e, 01:11e</i>	01:02P	
	<i>DQA1* 01:03:01:01</i> ; <i>DQA1* 01:03:01:02e-01:03:01:08e</i>	01:03P	
	<i>DQA1* 01:06e-01:07Qe, 01:10e, 01:13e-01:16Ne</i>	-	
DQA1*05	<i>DQA1* 05:01:01:01, 05:03:01:01, 05:05:01:01, 05:08</i> ; <i>DQA1* 05:09d</i> ; <i>DQA1* 05:01:01:02e-05:01:04e, 05:03:01:02e, 05:05:01:02e-05:07e, 05:11e</i>	05:01P	-
	<i>DQA1* 05:02d</i> ; <i>DQA1* 05:04e</i>	-	

HLA-DQB1

ALLELE GROUP	ALLELES	P GROUP	ANTIGEN
DQB1*03	DQB1* 03:01:01:01; DQB1* 03:01:03d-03:01:04d; DQB1* 03:01:01:02e-03:01:02e, 03:01:05e-03:01:41e	03:01P	DQ7
	DQB1* 03:09, 03:19:01; DQB1* 03:19:02e, 03:21e-03:22e, 03:24e, 03:29e, 03:35e, 03:42e, 03:49e-03:51e, 03:94e, 03:115e-03:116e, 03:164e-03:165e, 03:169e, 03:182e, 03:191e, 03:196e, 03:198e, 03:206e, 03:241e, 03:243e, 03:246e, 03:253e, 03:264e, 03:266e, 03:281e	03:01P	-
	DQB1* 03:13d; DQB1* 03:27e-03:28e, 03:36e, 03:44e, 03:46e-03:48e, 03:52e-03:60e, 03:69e, 03:71e, 03:73e, 03:75e-03:78e, 03:82e-03:84Ne, 03:92e-03:93e, 03:101e-03:103e, 03:108e-03:109e, 03:114e, 03:118Ne-03:122e, 03:127e-03:131e, 03:133e-03:135e, 03:139e-03:140e, 03:142e-03:144e, 03:147e-03:148e, 03:150e-03:152e, 03:154e, 03:157e-03:160e, 03:162e-03:163e, 03:166e-03:167e, 03:170e-03:171e, 03:173e, 03:186e-03:188e, 03:192e-03:194e, 03:201e-03:202e, 03:207e, 03:216e, 03:218e-03:219e, 03:231e-03:232e, 03:235e-03:236e, 03:242e, 03:252e, 03:254e-03:257e, 03:260e, 03:267e-03:268e, 03:271e, 03:275e-03:276Ne	-	
DQB1*06	DQB1* 06:11:02e-06:11:03e	06:11P	DQ1
	DQB1* 06:12e	-	
	DQB1* 06:02:07e, 06:02:11e	06:02P	DQ6
	DQB1* 06:03:01:01; DQB1* 06:03:01:02e-06:03:09e, 06:03:11e-06:03:13e, 06:03:15e-06:03:25e, 06:03:27e-06:03:31e	06:03P	
	DQB1* 06:04:01; DQB1* 06:04:02e-06:04:06e, 06:04:08e-06:04:11e	06:04P	
	DQB1* 06:05:01d; DQB1* 06:05:02e	06:05P	
	DQB1* 06:08:01; DQB1* 06:08:02e-06:08:03e	06:08P	
	DQB1* 06:09:01:01; DQB1* 06:09:01:02e-06:09:09e	06:09P	
	DQB1* 06:14e	06:14P	
	DQB1* 06:26Ne	-	Null
	DQB1* 06:41e, 06:44e, 06:110e, 06:185e, 06:187e, 06:218e, 06:221e, 06:223e, 06:250e, 06:253e, 06:272e	06:03P	-
	DQB1* 06:34e, 06:36e, 06:38e-06:39e, 06:52e, 06:86e, 06:217e, 06:254e, 06:265e, 06:267e	06:04P	
	DQB1* 06:07e	06:07P	
	DQB1* 06:88e, 06:189e	06:09P	
	DQB1* 06:13e	06:13P	
	DQB1* 06:18e	06:18P	
	DQB1* 06:22e	06:22P	
	DQB1* 06:27e	06:27P	

DQB1* 06:32e	06:32P
DQB1* 06:69e	06:69P
DQB1* 06:118:01e-06:118:02e	06:118P
DQB1* 06:206e	06:206P
DQB1* 06:16e-06:17e, 06:21e, 06:28e, 06:30e-06:31e, 06:40e, 06:42e, 06:58e-06:60e, 06:62e, 06:64e-06:65e, 06:67e, 06:75Ne, 06:85e, 06:89e-06:94e, 06:106e, 06:119e, 06:121e, 06:126e, 06:128e-06:129e, 06:133e-06:136e, 06:141e-06:145e, 06:148e, 06:151e, 06:154e-06:155e, 06:158Ne, 06:160e, 06:164e-06:166e, 06:168e, 06:170e-06:171e, 06:174e, 06:180e, 06:182e, 06:184e, 06:186e, 06:191e, 06:193Ne, 06:195e-06:196e, 06:199e, 06:202e-06:204e, 06:207e, 06:210e, 06:212e, 06:222e, 06:230e-06:231e, 06:234e, 06:238e, 06:241e, 06:244e, 06:248e, 06:252Ne, 06:259e, 06:261e, 06:264e, 06:266e, 06:269e, 06:275e	-

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, 01:15e	-	
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, 02:10e	02:02P	
	DPA1* 02:03e-02:05e, 02:09e, 02:11e	-	

HLA-DPB1

EPITYPE	ALLELES	P GROUP	HVR-A	HVR-B	HVR-C	HVR-D	HVR-E	HVR-F
EDP01	DPB1* 01:01:01:01, 01:01:02:01; DPB1* 01:01:01:02e-01:01:01:04e, 01:01:02:02e-01:01:04e, 01:01:06e / DPB1* 162:01e / DPB1* 417:01e / DPB1* 616:01e	01:01P	VYQG	EEYA	AAE	ILEEK	V	DEAV
	DPB1* 118:01e / DPB1* 127:01e / DPB1* 159:01Ne / DPB1* 220:01e / DPB1* 267:01e / DPB1* 326:01e / DPB1* 327:01e / DPB1* 346:01e / DPB1* 481:01e / DPB1* 483:01e / DPB1* 542:01e / DPB1* 543:01e / DPB1* 632:01e / DPB1* 667:01e	-						

EPITYPE	ALLELES	P GROUP	HVR-A	HVR-B	HVR-C	HVR-D	HVR-E	HVR-F
EDP04	DPB1* 04:01:01:01; DPB1* 04:01:01:02e-04:01:01:23e, 04:01:01:25e-04:01:12e, 04:01:14e-04:01:37e / DPB1* 350:01e / DPB1* 415:01e / DPB1* 459:01e / DPB1* 464:01e / DPB1* 534:01e / DPB1* 615:01e / DPB1* 618:01e / DPB1* 670:01e / DPB1* 677:01e / DPB1* 699:01e	04:01P	LFQG	EEFA	AAE	ILEEK	M	GGPM
	DPB1* 04:01:01:24Ne / DPB1* 99:01e / DPB1* 120:01Ne / DPB1* 121:01e / DPB1* 128:01e / DPB1* 134:01e / DPB1* 149:01e / DPB1* 169:01e / DPB1* 174:01e / DPB1* 175:01e / DPB1* 180:01e / DPB1* 181:01e / DPB1* 192:01e / DPB1* 194:01e / DPB1* 195:01e / DPB1* 212:01e / DPB1* 213:01e / DPB1* 224:01e / DPB1* 225:01e / DPB1* 228:01e / DPB1* 231:01e / DPB1* 232:01e / DPB1* 240:01e / DPB1* 253:01e / DPB1* 255:01e / DPB1* 262:01e / DPB1* 272:01e / DPB1* 275:01e / DPB1* 276:01e / DPB1* 281:01e / DPB1* 282:01e / DPB1* 283:01e / DPB1* 298:01e / DPB1* 320:01e / DPB1* 323:01e / DPB1* 334:01e / DPB1* 335:01e / DPB1* 336:01e / DPB1* 341:01e / DPB1* 356:01e / DPB1* 360:01e / DPB1* 372:01e / DPB1* 376:01e / DPB1* 378:01e / DPB1* 396:01e / DPB1* 397:01e / DPB1* 418:01e / DPB1* 425:01e / DPB1* 426:01e / DPB1* 428:01e / DPB1* 434:01e / DPB1* 453:01e / DPB1* 455:01Ne / DPB1* 465:01e / DPB1* 468:01e / DPB1* 475:01e / DPB1* 476:01e / DPB1* 479:01e / DPB1* 485:01e / DPB1* 486:01e / DPB1* 487:01e / DPB1* 497:01e / DPB1* 500:01e / DPB1* 520:01e / DPB1* 521:01e / DPB1* 522:01e / DPB1* 523:01e / DPB1* 524:01e / DPB1* 529:01e / DPB1* 553:01e / DPB1* 554:01e / DPB1* 556:01e / DPB1* 559:01e / DPB1* 569:01e / DPB1* 575:01e / DPB1* 578:01e / DPB1* 583:01e / DPB1* 591:01e / DPB1* 593:01e / DPB1* 607:01e / DPB1* 614:01e / DPB1* 625:01e / DPB1* 643:01e / DPB1* 658:01e / DPB1* 666:01e / DPB1* 682:01e / DPB1* 683:01e / DPB1* 694:01e	-						
This epitype was AUTOMATICALLY chosen because it is the only one which does not require a rare allele.								
This genotype was chosen as the most likely; cannot exclude one or more rare genotypes.								

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