Minnesota Health

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ASHI: 08-4-MN-01-1

CLIA UMMC: 24D0688128 CLIA Outreach 24D0995276

TEST INFO

Sample Date: Amp Tech: Kit Lot #: **K3641-CR**Sample ID: **1812553** Analysis Tech: Test Date: **12**/5/2018

Patient ID: AFLE337 Review Tech:

SUMMARY

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

TEST	GENOTYPE	PHENOTYPE
HLA-A	A*02 A*33	A2 A33
HLA-B	B*45 B*53	B45 B53
HLA-DRB1	DRB1*03 DRB1*15	DR17 DR15
HLA-DQA1	DQA1*01 DQA1*05	DQA1*01 DQA1*05
HLA-DPA1	DPA1*02 DPA1*02	DPA1*02 DPA1*02

TEST	GENOTYPE	PHENOTYPE
HLA-C	C*04 C*16	Cw4 Cw16
Bw		Bw4 Bw6
HLA-DRB345	DRB3*02 DRB5*01	DR52 DR51
HLA-DQB1	DQB1*02 DQB1*06	DQ2 DQ6

EPITYPE	ALLELES	HVR-A	HVR-B	HVR-C	HVR-D	HVR-E	HVR-F
EDP27	DPB1* 85:01:01 (+2 rare alleles)	VYQL	EEYA	AAE	ILEEK	M	DEAV
EDP30	DPB1* 30:01 (+1 rare alleles)	VHQL	EEFV	EAE	ILEEE	М	DEAV

(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.

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LABORATORY ASSIGNMENT

HLA-A: **A2 A33** HLA-B: **B45 B53** Bw: Bw4 Bw6 HLA-C: Cw4 Cw16 HLA-DRB1: DR17 DR15 HLA-DRB345: **DR52 DR51**

HLA-DQA1: DQA1*01 DQA1*05 HLA-DQB1: DQ2 DQ6 HLA-DPA1: **DPA1*02 DPA1*02** HLA-DPB1: **DPB1*85:01**

DPB1*30:01

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HLA-A

GROUP	ALLELES	ANTIGE
A*02	A* 02:01:01:01, 02:01:04, 02:02:01:01, 02:04-02:05:01:01, 02:06:01:01, 02:07:01, 02:08-02:09, 02:11:01, 02:14, 02:17:01, 02:20:01, 02:22:01:01, 02:24:01; A* 02:12d-02:13d, 02:16d, 02:18d, 02:21d, 02:25d, 02:29d, 02:34d, 02:49d, 02:74:01d; 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-02:01:75e-02:01:75e-02:01:132e, 02:02:01:02e-02:02:04e, 02:05:01:02e-02:05:04e, 02:05:04e, 02:05:06e, 02:06:01:02e-02:06:06e, 02:06:08e-02:06:11e, 02:06:13e-02:06:22e, 02:07:02e-02:07:09e, 02:11:03e-02:11:09e, 02:17:02e-02:17:04e, 02:20:02e, 02:22:01:02e-02:22:02e, 02:24:02e, 02:31e, 02:41e-02:42e, 02:59e, 02:66e-02:68e, 02:70e-02:72e, 02:74:02e, 02:77e, 02:79:01e, 02:89e-02:90e, 02:97e, 02:105e	A2
	A* 02:03:05e	A203
	A* 02:15Ne, 02:32Ne, 02:43Ne, 02:82Ne-02:83Ne, 02:88Ne, 02:94Ne, 02:113Ne, 02:125Ne	Null
	A* 02:30:01, 02:60:01; A* 02:27d, 02:33d, 02:36d, 02:44d-02:45d, 02:58d, 02:63d-02:64:01d, 02:84d-02:86:01d, 02:96d, 02:119d, 02:123d, 02:131d, 02:137d; A* 02:01:14Qe, 02:26e, 02:28e, 02:30:02e, 02:37e, 02:40e, 02:47e, 02:51e, 02:54e, 02:56:01e, 02:57e, 02:60:02e-02:62e, 02:69e, 02:75e-02:76:01e, 02:80e, 02:91e-02:92e, 02:99e-02:102e, 02:104e, 02:106e-02:109e, 02:111e, 02:115e-02:116e, 02:118e, 02:120e-02:121e, 02:126e-02:128e, 02:130e, 02:132e-02:134e, 02:138e-02:142e, 02:144e-02:147e, 02:149e-02:151e, 02:153e-02:155e, 02:157e-02:168e, 02:170e, 02:172e-02:184e, 02:186e-02:29e, 02:231e-02:236e, 02:238e-02:241e, 02:243:01e, 02:246e-02:252e, 02:254e-02:257e, 02:259e-02:263e, 02:265e-02:278e, 02:283e-02:299e, 02:301Ne-02:303e, 02:305Ne-02:308e, 02:310e-02:314Ne, 02:316e-02:333e, 02:335e-02:337e, 02:340e-02:344e, 02:346e-02:354e, 02:356Ne-02:369e, 02:371e-02:397e, 02:399e-02:408e, 02:415e-02:411e, 02:413e-02:426e, 02:428e-02:430e, 02:432e-02:446e, 02:448e-02:452e, 02:455e-02:462e, 02:464e-02:465e, 02:467e-02:479e, 02:481e-02:503e, 02:506Ne-02:524:01e, 02:525Ne-02:526e, 02:528:01e, 02:530e-02:543e, 02:556e, 02:558e-02:567e, 02:569e, 02:572e-02:579e, 02:581e, 02:583e-02:590e, 02:591:02e-02:593e, 02:595e-02:600e, 02:602e-02:603e, 02:602e-02:643Ne, 02:645e-02:650e, 02:620e-02:627e, 02:629e, 02:632e, 02:635e-02:640e, 02:642e-02:643Ne, 02:645e-02:650e, 02:652e-02:665e, 02:667e-02:680e, 02:682e-02:683e, 02:685e-02:694e	-
A*33	A* 33:01:01:01, 33:03:01; <i>A*</i> 33:05d; A* 33:01:01:02e-33:01:04e, 33:01:06e-33:01:10e, 33:03:02e, 33:03:04e-33:03:26e, 33:03:28e-33:03:32e	A33
	A* 33:03:03Qe, 33:04e, 33:06e-33:07e, 33:10e, 33:12e, 33:14e-33:18:01e, 33:20e, 33:22e-33:23e, 33:25e-33:31e, 33:32:02e-33:47e, 33:49e-33:50e, 33:52e, 33:54e-33:91e, 33:93e-33:118e, 33:120e-33:124e, 33:126e-33:130e	-

HLA-B

GROUP	ALLELES	ANTIGEN
B*45	B* 45:01:01 ; B* 45:01:02e	B45
	B* 45:03e, 45:05e, 45:07e, 45:11e-45:20e	-
B*53	B* 53:01:01 ; B* 53:01:02e-53:01:12e	B53
	B* 53:08e, 53:10e, 53:15e, 53:18e, 53:20e-53:21e, 53:23e-53:27e, 53:29e, 53:32e, 53:34e-53:35e, 53:37e, 53:41e-53:42e, 53:45e-53:48Ne	-

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	ALLELES	ANTIGEN
Bw4	B* 53:01:01 ; B* 53:01:02e-53:01:12e, 53:08e, 53:10e, 53:15e, 53:18e, 53:20e-53:21e, 53:23e-53:27e, 53:29e, 53:32e, 53:34e-53:35e, 53:37e, 53:41e-53:42e, 53:45e-53:48Ne	Bw4
Bw6	B* 45:01:01 ; B* 45:01:02e, 45:03e, 45:05e, 45:07e, 45:11e-45:20e	Bw6

HLA-C

GROUP	ALLELES	ANTIGEN
C*04	C* 04:01:01:01, 04:07 ; <i>C* 04:10d</i> ; C* 04:01:01:02e-04:01:22e, 04:01:24e-04:01:83e, 04:20e	Cw4
	C* 04:04:01:01; C* 04:05d, 04:08d, 04:19d, 04:27d, 04:82d; C* 04:05d, 04:08e-04:02e, 04:11e-04:12e, 04:14e-04:15e, 04:18e, 04:23e-04:26e, 04:28e-04:31e, 04:33e, 04:35e-04:36e, 04:38e-04:41e, 04:43e-04:57e, 04:59Qe-04:60e, 04:62e-04:67e, 04:69e-04:76e, 04:78e-04:79e, 04:81e, 04:83e-04:93Ne, 04:95Ne-04:99e, 04:101e-04:102e, 04:104e-04:106e, 04:108e-04:111e, 04:114e-04:121e, 04:123Ne-04:139e, 04:141e-04:146e, 04:148e-04:159e, 04:161e-04:168e, 04:170Ne, 04:172e-04:177e, 04:179e-04:189e, 04:191Ne-04:211e, 04:214e-04:216e, 04:218e-04:219e, 04:221e-04:222e, 04:225Ne-04:229e, 04:231e-04:255Ne, 04:257e-04:262e, 04:266e-04:276e, 04:278e-04:279Ne	-
C*16	C* 16:01:01:01, 16:02:01; C* 16:01:01:02e-16:01:01:04e, 16:01:03e-16:01:15e, 16:01:17e-16:01:20e, 16:01:22e, 16:02:02e, 16:02:04e-16:02:12e, 16:08e-16:25e, 16:27e-16:28e, 16:30Ne-16:33e, 16:35e-16:39e, 16:41e, 16:44e-16:45e, 16:47e-16:49e, 16:51e-16:52e, 16:54e, 16:56e-16:60e, 16:62e-16:63e, 16:65e, 16:67e-16:69e, 16:77Ne, 16:79e-16:81e, 16:83e-16:84e, 16:86e, 16:88e-16:90e, 16:92e-16:108e, 16:111e-16:112e	-

HLA-DR

HLA-DRB1

GROUP	ALLELES	ANTIGEN
DRB1*03	DRB1* 03:06d, 03:23d; DRB1* 03:12e	DR3
	DRB1* 03:01:01:01 ; <i>DRB1* 03:01:02d, 03:04:01d</i> ; DRB1* 03:01:01:02e-03:01:01:03e, 03:01:03e-03:01:05e, 03:01:07e-03:01:26e, 03:04:02e, 03:11:01e	DR17
	DRB1* 03:16d, 03:22d; DRB1* 03:13e, 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-03:64e, 03:66e-03:73e, 03:77e, 03:79e-03:80e, 03:82e-03:86e, 03:89e, 03:91e, 03:93e-03:96e, 03:98e-03:100e, 03:104e, 03:106e-03:114e, 03:116e-03:117e, 03:121e, 03:123e-03:124e, 03:127e-03:129e, 03:132e-03:139e	-

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GROUP	ALLELES	ANTIGEN
DRB1*15	DRB1* 15:08e	DR2
	DRB1* 15:01:01:01, 15:02:01:01, 15:02:02, 15:03:01:01, 15:04, 15:06:01; DRB1* 15:01:01:02e-15:01:21e, 15:01:23e-15:01:33e, 15:02:01:02e-15:02:01:03e, 15:02:03e-15:02:18e, 15:03:01:02e-15:03:02e, 15:05e, 15:06:02e-15:06:03e	DR15
	DRB1* 15:17Ne	Null
	DRB1* 15:14d, 15:18d, 15:20d, 15:22d-15:24d, 15:38d; DRB1* 15:09e, 15:12e-15:13e, 15:15e-15:16e, 15:19e, 15:26e, 15:28e-15:33e, 15:35e-15:37e, 15:39e-15:47e, 15:49e, 15:51e-15:53e, 15:55e-15:65e, 15:67e-15:79e, 15:81e-15:83e, 15:85e-15:87e, 15:89e-15:95e, 15:97e-15:98e, 15:101e-15:102e, 15:104e-15:108e, 15:110e-15:114e, 15:116e, 15:118e-15:119e, 15:121e, 15:123e-15:128e, 15:130e-15:147e	-

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, 02:33e, 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	-
DRB5*01	DRB5* 01:01:01 , 01:02 ; DRB5* 01:01:02d; DRB5* 01:01:03e, 01:07e	DR51
	DRB5*01:03; DRB5*01:04e, 01:05e, 01:06e, 01:09e, 01:11e, 01:12e, 01:13e, 01:14e, 01:15e, 01:16e, 01:17e, 01:18e, 01:19e, 01:22e, 01:23e, 01:24e, 01:25e, 01:26e, 01:27Ne, 01:28e, 01:29e, 01:30e, 01:31e, 01:32e, 01:33e, 01:34e, 01:35e	-

Cannot exclude RARE alleles from another locus.

HLA-DQA1

GROUP	ALLELES	ANTIGEN
DQA1*01	DQA1* 01:01:01:01, 01:01:02, 01:02:01:01, 01:03:01:01, 01:04:01:01, 01:05:01; DQA1* 01:02:02d; DQA1* 01:01:01:02e-01:01:05e, 01:01:03e, 01:02:01:02e-01:02:01:08e, 01:02:03e-01:02:04e, 01:03:01:02e-01:03:01:08e, 01:04:01:02e-01:04:02e, 01:05:02e-01:16Ne	-
DQA1*05	DQA1* 05:01:01:01, 05:03:01:01, 05:05:01:01, 05:08; DQA1* 05:02d, 05:09d; DQA1* 05:01:01:02e-05:01:02e, 05:03:01:02e-05:04e, 05:05:01:02e-05:07e, 05:11e	-

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HLA-DQB1

GROUP	ALLELES	ANTIGEN
DQB1*02	DQB1* 02:01:01, 02:02:01:01, 02:03; DQB1* 02:01:02e-02:01:24e, 02:02:01:02e-02:02:04e	DQ2
	DQB1* 02:04e-02:53Qe, 02:55e-02:101e	-
DQB1*06	DQB1* 06:11:01d; DQB1* 06:11:02e-06:11:03e	DQ1
	DQB1* 06:02:01:01 ; DQB1* 06:02:01:02e-06:02:04e, 06:02:06e-06:02:13e, 06:02:15e-06:02:28e	DQ6
	DQB1* 06:15e-06:16e, 06:20e, 06:24e, 06:33e, 06:37e, 06:46e-06:51e, 06:68e, 06:70e-06:81e, 06:83e-06:84e, 06:95e-06:97e, 06:106e-06:107e, 06:109e, 06:111e-06:118e, 06:122e, 06:125e-06:127e, 06:131e, 06:136e-06:138e, 06:146e-06:147e, 06:150e-06:152e, 06:159e, 06:161e, 06:166e, 06:173e-06:176e, 06:178e-06:179Ne, 06:182e-06:183e, 06:188e, 06:192e, 06:197e-06:198e, 06:208e, 06:211e, 06:213e, 06:215e-06:216Ne, 06:219e, 06:224e-06:228e, 06:232e, 06:235e-06:237e, 06:240e	-

HLA-DPA1

GROUP	ALLELES	ANTIGEN
DPA1*02	DPA1* 02:01:01:01, 02:07:01:01 ; DPA1* 02:01:01:02e-02:06e, 02:07:01:02e-02:08e	-
DPA1*02	DPA1* 02:01:01:01, 02:07:01:01 ; DPA1* 02:01:01:02e-02:06e, 02:07:01:02e-02:08e	-

HLA-DPB1

EPITYPE	ALLELES	HVR-A	HVR-B	HVR-C	HVR-D	HVR-E	HVR-F
EDP27	DPB1* 85:01:01:01 ; DPB1* 85:01:01:02e-85:01:02e	VYQL	EEYA	AAE	ILEEK	М	DEAV
EDP30	DPB1* 30:01 ; DPB1* 408:01e	VHQL	EEFV	EAE	ILEEE	М	DEAV

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