

DCI Transplant Immunology Laboratory

1616 Hayes Street, Nashville, TN 37203

615-321-0212 / 615-321-4880 fax

TEST INFOSample Date: **6/20/2019**Sample ID: **19-**

Patient ID:

DOB:

Test Date: **6/21/2019**Kit Exp Date: **2020-05-31**

Patient Name:

Draw Time: **1805**Kit Lot #: **K3737-DR**Serum archived?: **YES**Tech: **PJ**DQC/NTC Pass?: **PASS****SUMMARY**

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

TEST	GENOTYPE	PHENOTYPE	TEST	GENOTYPE	PHENOTYPE
HLA-A	A*03 A*03	A3 A3	HLA-C	C*03 C*06	Cw10 Cw6
HLA-B	B*40 B*57	B60 B57	Bw		Bw4 Bw6
HLA-DRB1	DRB1*04 DRB1*07	DR4 DR7	HLA-DRB345	DRB4*01 DRB4*01:03:01:02N	DR53 DR53-Null
HLA-DQA1	DQA1*02 DQA1*03	DQA1*02 DQA1*03	HLA-DQB1	DQB1*03 DQB1*03	DQ8 DQ9
HLA-DPA1	DPA1*01 DPA1*02	DPA1*01 DPA1*02			

EPITYPE	ALLELES	HVR-A	HVR-B	HVR-C	HVR-D	HVR-E	HVR-F
EDP02	DPB1*02: 01:02:01 (+163 rare alleles)	LFQG	EEFV	DEE	ILEEE	M	GGPM
EDP13	DPB1*13: 01:01:01 (+23 rare alleles)	VYQL	EEYA	AAE	ILEEE	I	DEAV
<i>This epitope was AUTOMATICALLY chosen because it is the only one which does not require a rare allele.</i>							

*(Notice: Cannot exclude other combinations. Review all results.)**All test results are based on IMGT/HLA release: version 3.35.0 - Jan 2019**For research use only. Not for use in diagnostic procedures.***LABORATORY ASSIGNMENT**

HLA-A: **A3 A3**
HLA-C: **Cw10 Cw6**
HLA-DQA1: **DQA1*02 DQA1*03**
HLA-DPA1: **DPA1*01 DPA1*02**

HLA-B: **B60 B57**
HLA-DRB1: **DR4 DR7**
HLA-DQB1: **DQ8 DQ9**
HLA-DPB1: **DPB1*02:01:02:01**
DPB1*13:01:01:01

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

REVIEW

Analyzed By:	admin	Signature:	Date:
Reviewed By:		Signature:	Date:

HLA-A

GROUP	ALLELES	ANTIGEN
A*03	A*03: 01:01:01 , 01:01:03d-01:02d, 01:04e-01:18e, 01:20e-01:37e, 01:40e-01:78e, 02:01 , 02:02e-02:04e, 04e, 05:01 , 05:02e, 20e	A3
	A*03: 01:01:02Ne, 03Ne, 11Ne, 21Nd	Null
	A*03: 06d-07d, 09d, 13e-16e, 17:02e, 19e, 22d, 23:02e, 25e-29e, 31e, 33e-35e, 37e-40e, 42e, 44e-71e, 73e-81e, 83e-87e, 90e-103:01e, 104e-106e, 109e-151e, 153e-166e, 168Ne-170e, 173e-175e, 177e-185e, 187e-197Ne, 199e-204e, 206e-218e, 220e-230e, 231:02e-247e, 249e-251e, 253e-272e, 274e-277e, 279Ne-329Ne, 331e-334Ne	-
A*03	A*03: 01:01:01 , 01:01:03d-01:02d, 01:04e-01:18e, 01:20e-01:37e, 01:40e-01:78e, 02:01 , 02:02e-02:04e, 04e, 20e	A3
	A*03: 01:01:02Ne, 03Ne, 11Ne, 21Nd	Null
	A*03: 06d-09d, 12e-16e, 17:02e, 19e, 22d, 23:02e, 25e-29e, 31e-35e, 37e-40e, 44e-56e, 58e-81e, 83e-88e, 89:02e-103:01e, 104e-106e, 108d, 110e-121e, 123e-134e, 136e-151e, 153e-166e, 168Ne-170e, 172e-185e, 188e-218e, 220e-224e, 226e-230e, 231:02e-247e, 249e-266Ne, 268e-272e, 274e-277e, 279Ne-329Ne, 331e, 333e-334Ne	-

HLA-B

GROUP	ALLELES	ANTIGEN
B*40	B*40: 01:01e , 01:02:01 , 01:02:02e-01:05e, 01:07e-01:16e, 01:18e-01:60e, 10d, 52e, 54e	B60
	B*40: 22Nd	Null
	B*40: 33e, 36e, 38e, 42e-43d, 49e, 55e, 62e, 65e-67e, 69e, 73e, 76e, 79e, 81e, 84e, 87e-88e, 100e-102e, 108e, 112e-114d, 116e, 118Ne, 123e, 125e-126e, 128e, 134e-135e, 138e-141e, 146e-147e, 150e-156e, 168e, 171e-172e, 175e, 179e, 182e, 186e-187e, 191e-197e, 204e, 207e-208e, 212e-213e, 215e-218e, 221e-223e, 227e-228e, 233e-236e, 238e-242e, 245e, 247e, 249e-253e, 257e-264e, 272e-273e, 277e-278e, 280e, 282e, 285e-286Ne, 288e, 298:02e-301e, 308e, 310e, 312e, 315e-316e, 319e, 321e, 323e, 325e-329e, 332e-333e, 336e, 338Ne-339e, 344e, 346e, 353e, 357e-358e, 360e, 367e-368e, 370e, 372Ne, 379e-383e, 385e-386e, 391e-393e, 395e-397e, 400e-404e, 406e-407e	-
B*57	B*57: 01:01:01 , 01:01:02e-01:08e, 01:10e-01:36e, 08e	B57
	B*57: 06e, 10e, 13e-15e, 18e-21e, 23e-27e, 29e-31e, 33e-38e, 40e-41e, 43e-44e, 47e-50e, 52e-56e, 59e-62e, 64e-65e, 68e, 72e-75e, 77e-79Ne, 81e, 85e-87e, 89e-92e, 95e, 97e-100e, 102e-114e	-
	ALLELES	ANTIGEN
Bw4	B*57: 01:01:01 , 01:01:02e-01:08e, 01:10e-01:36e, 06e, 08e, 10e, 13e-15e, 18e-21e, 23e-27e, 29e-31e, 33e-38e, 40e-41e, 43e-44e, 47e-50e, 52e-56e, 59e-62e, 64e-65e, 68e, 72e-75e, 77e-79Ne, 81e, 85e-87e, 89e-92e, 95e, 97e-100e, 102e-114e	Bw4

	ALLELES	ANTIGEN
Bw6	B*40: 01:01e, 01:02:01 , 01:02:02e-01:05e, 01:07e-01:16e, 01:18e-01:60e, <i>10d</i> , <i>22Nd</i> , 33e, 36e, 38e, 42e-43d, 49e, 52e, 54e-55e, 62e, 65e-67e, 69e, 73e, 76e, 79e, 81e, 84e, 87e-88e, 100e-102e, 108e, 112e-114d, 116e, 118Ne, 123e, 125e-126e, 128e, 134e-135e, 138e-141e, 146e-147e, 150e-156e, 168e, 171e-172e, 175e, 179e, 182e, 186e-187e, 191e-197e, 204e, 207e-208e, 212e-213e, 215e-218e, 221e-223e, 227e-228e, 233e-236e, 238e-242e, 245e, 247e, 249e-253e, 257e-264e, 272e-273e, 277e-278e, 280e, 282e, 285e-286Ne, 288e, 298:02e-301e, 308e, 310e, 312e, 315e-316e, 319e, 321e, 323e, 325e-329e, 332e-333e, 336e, 338Ne-339e, 344e, 346e, 353e, 357e-358e, 360e, 367e-368e, 370e, 372Ne, 379e-383e, 385e-386e, 391e-393e, 395e-397e, 400e-404e, 406e-407e	Bw6

HLA-C

GROUP	ALLELES	ANTIGEN
C*03	C*03: <i>10d</i> , 24e, <i>40:01d</i> , 40:03e-40:04e	Cw3
	C*03: 02:16e, 04:01:01 , 04:01:02e-04:01:13e, 04:02 , 04:03e-04:24e, 04:26e, 04:28e-04:58e, 04:60e-04:73e, 06:01 , 06:02e, 26e, 28e	Cw10
	C*03: <i>08d</i> , <i>17d</i> , 23e, 29e, 32e, 34e-35d, 37e-38e, 44e, 46e-48e, 51e, 54e, 57e, 63e-65e, 70e, 72e-74e, 77e-78e, 82e, 87:02e, 90e-91e, 93e, 98e-101e, 104e-107e, 109e, 111e, 114e-115e, 118e, 123e, 125e, 128e-131e, 134e-138e, 140e, 145e, 147e-149e, 153e-157e, 159e, 162e, 164e, 166e, 170e, 172e-174e, 178e-181e, 183e-184e, 186e, 191e, 193e-194e, 198e, 208Ne-213e, 215e, 218e-219e, 232e-236e, 239e, 244Qe, 246e-247e, 250e, 252e, 255e-257e, 259e, 261e, 263:03e, 265Ne-266e, 269e-270e, 277Ne-279e, 281e-283e, 286e-287e, 294e, 303e, 305e-306e, 309e-311e, 313e-314e, 317e-318Ne, 322e-323Ne, 328e, 330e, 333e-334e, 337e, 340e, 342e-343e, 347e-348e, 353e-355e, 358e-359e, 362e, 366Ne, 369e, 376e, 379e, 381e-382e, 385e, 387e-388e, 390e, 392Ne-394e, 396Ne-397e, 399e-401e, 403e-405e, 408e-410e, 412e, 415e, 417e, 419e-420e, 423e-424Ne, 426e, 434e, 437e, 439e, 441e-443e, 445Ne-446Ne, 448Qe, 453e-456e, 458e-459e	-
C*06	C*06: 02:01:01 , <i>02:01:02d</i> -02:07e, 02:09e-02:71e	Cw6
	C*06: 16Ne	Null
	C*06: 03:02e, 04:02e, <i>07d</i> -15e, 17e-29e, 32e-34:01e, 36e-43e, 45e-66e, 68e-71e, 73e-76:01e, 77e-100e, 102e-117e, 119e-123e, 125e-126e, 128Ne-131e, 133e-135e, 137e, 139e-142e, 145e-146e, 148e-152Ne, 154e-167e, 169e-191e, 193e-196e, 199e-203e, 205e-209e, 211Ne-216e, 218e-223e, 225e-247e, 249e-251e	-

HLA-DR

HLA-DRB1

GROUP	ALLELES	ANTIGEN
DRB1*04	DRB1*04: 01:09e, 01:13e-01:15e, 03:05e, 03:11e, 04:01 , 04:02e-04:15e, 05:17e-05:18e, 08:01 , 08:02e-08:04e, <i>23d</i> , <i>25d</i> , 31e-32e, 42e	DR4
	DRB1*04: <i>18d</i> , 36e-37e, <i>40d</i> , 43e-44e, 47e, <i>50d-51d</i> , 53e-58e, 62e, 70e, 73e, 75e-76e, 79e, 82e, 94Ne-95e, 98e, 108e, 118e, 120Ne-122e, 127e-128e, 132e, 140e-141e, 143e, 149e, 157Ne, 159e, 163e-164e, 166e-168e, 177e, 180e, 182e, 185e, 189e, 193e, 202e, 205e-206e, 220e-221e, 223e-225e, 230e-231e, 240e, 247Ne, 252e, 258e, 272e	-

GROUP	ALLELES	ANTIGEN
DRB1*07	DRB1*07: 01:01:01, 01:01:02e-04e, 09e	DR7
	DRB1*07: 10Ne	Null
	DRB1*07: 05d-08e, 11d-49e, 51e-100e	-

HLA-DRB345

GROUP	ALLELES	ANTIGEN
DRB4*01	DRB4* 01:01:02e, 01:03:01:01, 01:03:01:03e, 01:03:01:04e, 01:03:01:05e, 01:03:01:06e, 01:03:01:07e, 01:03:01:08e, 01:03:02d, 01:03:03, 01:03:04e, 01:03:05e, 01:03:06e, 01:03:07e, 01:03:08e, 01:03:09e, 01:03:10e, 01:03:11e, 01:05e	DR53
	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, 01:57Ne, 01:58e, 01:59e, 01:60e, 01:61Ne, 01:62e, 01:63e, 01:64e, 01:65Ne, 01:66e, 01:67e, 01:68e, 01:69e, 01:71Ne, 01:72e, 01:73e, 01:74e, 01:76e, 01:77e, 01:78e, 01:80Ne, 01:81e, 01:82e, 01:83e, 01:84Ne, 01:85e, 01:86e	-
DRB4*01:03:01:02N	DRB4* 01:03:01:02N	Null

Cannot exclude RARE alleles from another locus.

HLA-DQA1

GROUP	ALLELES	ANTIGEN
DQA1*02	DQA1*02: 01:01:01, 01:01:02e-03e	-
DQA1*03	DQA1*03: 01:01, 01:03e, 03:01:01, 03:01:02e-05e	-

HLA-DQB1

GROUP	ALLELES	ANTIGEN
DQB1*03	DQB1*03: 02:01:01, 02:01:02e-02:30e	DQ8
	DQB1*03: 07e-08e, 11e, 14e, 18e, 32e, 37e, 45e, 62e-64e, 66Ne-68e, 70e, 81e, 85e, 106e-107e, 125e, 138e, 146e, 153e, 161e, 174e-175e, 178e-179e, 185e, 189e-190e, 199e, 203e-205e, 210e-211e, 213Ne-215e, 220e, 223e-226e, 228e-229e, 233e, 237Ne, 240e, 245e, 247e, 251e, 261e, 263e, 265e, 269Ne, 273e-274e, 277e-279e, 287e, 289e, 295e-296e, 298e-301e, 308e, 310Ne, 315e, 320e-324e, 333e-334Ne, 339Ne, 343e-345e, 348e-349e, 352e	-
DQB1*03	DQB1*03: 03:02:01, 03:02:02e-03:21e	DQ9
	DQB1*03: 12e, 15e, 20e, 23:03e, 26e, 30e-31e, 33e-34e, 39e-41e, 43e, 65e, 79e, 86e-91Qe, 96e-99Qe, 104e-105e, 111e-112e, 117e, 123e-124e, 126e, 136e-137e, 141e, 145e, 149e, 155e-156e, 168e, 176e-177e, 200e, 209e, 212e, 217e, 222e, 227e, 230e, 238e-239e, 248e-249e, 258e, 270e, 280e, 283e, 304e, 313e, 316e, 319e, 332e, 336e-337e, 351e	-

HLA-DPA1

GROUP	ALLELES	ANTIGEN
DPA1*01	DPA1*01: 03:01:01, 03:01:02e-03:07e, 04, 05e-07e, 09e-10e, 12e, 14e-17e	-
DPA1*02	DPA1*02: 01:01:01, 01:01:02e-06e, 07:01:01, 07:01:02e-12e	-

HLA-DPB1

EPITYPE	ALLELES	HVR-A	HVR-B	HVR-C	HVR-D	HVR-E	HVR-F
EDP02	DPB1*02: 01:02:01, 01:02:02e-01:03e, 01:05e-01:41e / 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*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 / DPB1*678: 01e / DPB1*680: 01e / DPB1*681: 01e / DPB1*685: 01e / DPB1*692: 01e / DPB1*700: 01Ne / DPB1*723: 01e / DPB1*751: 01e / DPB1*770: 01e / DPB1*771: 01e / DPB1*780: 01e / DPB1*781: 01e / DPB1*783: 01e / DPB1*786: 01Ne / DPB1*799: 01e / DPB1*819: 01e / DPB1*827: 01e / DPB1*836: 01e / DPB1*843: 01e / DPB1*845: 01e / DPB1*857: 01e / DPB1*861: 01e / DPB1*884: 01e / DPB1*890: 01e / DPB1*894: 01Ne	LFQG	EEFV	DEE	ILEEE	M	GGPM
EDP13	DPB1*13: 01:01:01, 01:01:02e-01:03e / DPB1*107: 01e / DPB1*133: 01e / DPB1*362: 01e / DPB1*393: 01e / DPB1*438: 01e / DPB1*518: 01e / DPB1*564: 01e / DPB1*565: 01e / DPB1*597: 01e / DPB1*600: 01e / DPB1*612: 01e / DPB1*703: 01e / DPB1*888: 01e / DPB1*893: 01e / DPB1*924: 01e	VYQL	EEYA	AAE	ILEEE	I	DEAV

This epitope 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.