

UK NEQAS for H&I Scheme 2B - Crossmatching by Flow Cytometry

T-CELL AND B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B02/2016 (COMPARED TO LOCAL NEGATIVE CONTROL)

DISPATCHED ON 12TH JANUARY 2016

HLA PHENOTYPE OF BLOOD DONOR: HLA-A3, A11; B18, B38; Cw7, Cw12; DR4, DR11; DQ7, DQ8

Summary of Results												
T-cells					B-cells							
Total tested	19	21	21	21	19	18	19	19				
Positive	0	0	0	0	19	3	18	19				
Negative	19	21	21	21	0	15	1	0				
NT/Equivocal	4	2	2	2	1	2	1	1				
% Positive	0.0%	0.0%	0.0%	0.0%	100.0%	16.7%	94.7%	100.0%				
% Negative	100.0%	100.0%	100.0%	100.0%	0.0%	83.3%	5.3%	0.0%				
Consensus	Negative	Negative	Negative	Negative	Positive	Negative	Positive	Positive				
HLA Antibody Specificity (Defined By CDC)	B12	B12	DR7, DQ2	Cw5, DR4	B12	B12	DR7, DQ2	Cw5, DR4				
T-cells					B-cells					Date Received	Date Tested	Comments
Lab No.	Serum 1	Serum 2	Serum 3	Serum 4	Serum 1	Serum 2	Serum 3	Serum 4				
9	Equivocal	Negative	Negative	Negative						13-Jan	14-Jan	Insufficient T+B cells - Invalid results
11	Negative	Negative	Negative	Negative	Positive	Negative	Positive	Positive		14-Jan	15-Jan	
12	Negative	Negative	Negative	Negative	Positive	Negative	Positive	Positive		13-Jan	13-Jan	
14	Negative	Negative	Negative	Negative	Positive	Positive	Positive	Positive		13-Jan	13-Jan	
15	Negative	Negative	Negative	Negative	Positive	Negative	Positive	Positive		13-Jan	13-Jan	
19	Negative	Negative	Negative	Negative	Positive	Negative	Positive	Positive		13-Jan	13-Jan	
20	Negative	Negative	Negative	Negative	Positive	Positive	Positive	Positive		13-Jan	14-Jan	
23	Negative	Negative	Negative	Negative	Positive	Negative	Positive	Positive		13-Jan	13-Jan	
24	Negative	Negative	Negative	Negative	Positive	Negative	Negative	Positive		13-Jan	14-Jan	
25	Negative	Negative	Negative	Negative	Positive	Negative	Positive	Positive		14-Jan	15-Jan	
28	Equivocal	Equivocal	Equivocal	Equivocal	Positive	Negative	Positive	Positive		13-Jan	13-Jan	
34	Negative	Negative	Negative	Negative	Positive	Negative	Positive	Positive		13-Jan	13-Jan	
35	Negative	Negative	Negative	Negative						13-Jan	14-Jan	
38	Negative	Negative	Negative	Negative	Positive	Negative	Positive	Positive		13-Jan	13-Jan	
39	Negative	Negative	Negative	Negative	Positive	Negative	Positive	Positive		13-Jan	13-Jan	
41	NT	NT	NT	NT	NT	NT	NT	NT		13-Jan	13-Jan	
42	Equivocal	Negative	Negative	Negative	Positive	Negative	Positive	Positive		13-Jan	14-Jan	
45	Negative	Negative	Negative	Negative						13-Jan	14-Jan	
48	Negative	Negative	Negative	Negative	Positive	Negative	Positive	Positive		13-Jan	13-Jan	
51	Negative	Negative	Negative	Negative	Positive	Negative	Positive	Positive		13-Jan	14-Jan	
54	Negative	Negative	Negative	Negative	Positive	Positive	Positive	Positive		13-Jan	14-Jan	
58	Negative	Negative	Negative	Negative	Positive	Equivocal	Positive	Positive		13-Jan	13-Jan	
62	Negative	Negative	Negative	Negative	Positive	Negative	Positive	Positive		13-Jan	13-Jan	

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T-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B02/2016 (COMPARED TO LOCAL NEGATIVE CONTROL)

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Lab No.	Serum 1 cytometer reading	Serum 2 cytometer reading	Serum 3 cytometer reading	Serum 4 cytometer reading	Negative control (local)	Positive control (local)	Strong positive (local)	Weak positive (local)	Positive result value	Cytometer reading units	Viability (%)
9	Equivocal	0.58	0.58	0.54	0.84	5.70			>1.5x trimmed mean	Median x (log)	90
11	72	66	70	72	73	109			>80 (2SD)	Median log channel	90
12	125	105	118	108	108	205			Mean channel shift >50	MCF	
14	483	414	466	436	396.5	1596			1.5x mean neg	Median log channel	
15	242	188	244	216	198	11923					
	RMF 1.22	0.95	1.23	1.1					RMF >1.5	Median	80
19	0.278	0.235	0.274	0.255	0.244	4.128				Log median x	
20	0.5135	0.434	0.518	0.465	0.392	1.45			≥40 linear channel shift	Median log channel	90
23	4.64	3.62	5.2	4.86	4.7	31			+3SD	MCF	
24	128.3	120	119	126.6	127	486, 425			1.5x Neg	MFCN	95
25	71	58	73	64	68	4267			RMF >1.3	Median log channel	
28	1.6 (141)	1.9 (168)	1.8 (158)	1.7 (145)	87	1127			≥1.6	MFI (ratio)	
34	7.44	6.37	6.16	6.17	6.75	59			+2SD (8.48)	Median FL1	
35	1.08	1.02	1.05	1.1	1.48	4.64			Mean +3SD	Median fluorescence units	
38	45.1	0	45.1	45.1	0	484.8			46 linear channel shift	Linear channel shift	95
39	0.145	0.12	0.15	0.14	0.15	0.61			>1.5 RMF	Median log fluorescence	
41	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
42	205	189	205	190	161		1408	251	RMF ratio >1.3	Median log channel	95
45	204	170	199	190	195	472			235 (≥40 channel shift)	Median channel value	
48	0.62	0.57	0.6	0.61	0.59	6.17			≥1.3 RMF	Median log channel	
51	3.67	2.81	2.14	2.37	3.95	59.35			6.35 (+2.4 shift)		95
54	294, 307	282, 276	295, 282	266, 288	287, 273, 289, 294, 301, 289	744			MESF ratio ≥1.5	Median channel shift	
58	1.3	1.21	1.25	1.24	1.26	5.08			1.64 (1.3x mean)	Log median	
62	0.524	0.47	0.53	0.54	0.49	5.12			RMF >1.5	Median log channel	99

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Lab No.	Serum 1 cytometer reading	Serum 2 cytometer reading	Serum 3 cytometer reading	Serum 4 cytometer reading	Negative control (local)	Positive control (local)	Strong positive (local)	Weak positive (local)	Positive result value	Cytometer reading units	Viability (%)
11	2384	476	922	2632	462	3494			>740 (1.6 RMF)	Median log channel	90
12	2604	763	1718	3052	676	1817			Mean channel shift >50	MCF	
14	8190	2403	5823	9335	1309	21215			1.5x mean neg	Median log channel	
15	12099	1582	4204	7569	1640	26465					
19	RMF 7.38	0.96	2.56	4.63					RMF >1.5	Median	80
20	14.351	4.28	8.79	15.008	3.415	34.798				Log median x	
23	31.975	4.1475	15.6	34.3	2.245	5.79			≥40 linear channel shift	Median log channel	90
24	66.4	9.8	44.2	55.4	9	155.3			+2SD	MCF	
25	1666.3	332.7	492	2782.7	486.5	7572, 1007			2x Neg	MFCN	95
28	3478	433	1643	4165	745	8919			RMF >1.3	Median log channel	
34	7.4 (806)	1.5 (165)	4.5 (491)	8.6 (940)	109	1134			≥1.9	MFI (ratio)	
38	98.6	35.6	63	105	33.5	148			+2SD (39.4)	Median FL1	
39	168	-23.9	125.5	189.5	0	311.6			63 linear channel shift	Linear channel shift	95
41	4.21	0.42	1.83	4.34	0.42	5.89			>2.0 RMF	Median log fluorescence	
42	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
48	5313	897	3454	6113	600	13.68	36908	1337	RMF ratio >1.5	Median log channel	95
51	8.69	1.54	4.5	9.53	1.72	137			≥1.3 RMF	Median log channel	
54	48.31	5.12	27.64	64.07	6.07	12.57 (+6.5 shift)			MESF ratio ≥1.5	Median channel shift	95
58	688, 681	583, 605, 587	713, 703, 722	706, 714, 710	483, 472, 473, 475, 469	44.8			4.07 (1.3x mean)	Log median	
62	25.63	4.86	11.77	25.67	3.13	64.15			RMF >3.0	Median log channel	99
62	27.80	3.45	14.30	36.60	2.11						