

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

T-CELL AND B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B01/2016 (COMPARED TO LOCAL NEGATIVE CONTROL)

DISPATCHED ON 12TH JANUARY 2016

HLA PHENOTYPE OF BLOOD DONOR: HLA-A2, A29; B44, B45; Cw6, Cw16; DR4, DR7; DQ2, DQ7

	Summary of Results							
	T-cells				B-cells			
	Total tested	22	23	23	23	19	20	20
Positive	0	23	23	23	0	20	20	20
Negative	22	0	0	0	19	0	0	0
NT/Equivocal	1	0	0	0	1	0	0	0
% Positive	0.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	100.0%
% Negative	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
<b>Consensus</b>	<b>Negative</b>	<b>Positive</b>	<b>Positive</b>	<b>Positive</b>	<b>Negative</b>	<b>Positive</b>	<b>Positive</b>	<b>Positive</b>
HLA Antibody Specificity (Defined By CDC)	B12	DR7, DQ2	Cw5, DR4	B12	B12	DR7, DQ2	Cw5, DR4	B12
	T-cells				B-cells			
Lab No.	Serum 1	Serum 2	Serum 3	Serum 4	Serum 1	Serum 2	Serum 3	Serum 4
9	Negative	Positive	Positive	Positive				
11	Negative	Positive	Positive	Positive	Negative	Positive	Positive	Positive
12	Negative	Positive	Positive	Positive	Negative	Positive	Positive	Positive
14	Negative	Positive	Positive	Positive	Negative	Positive	Positive	Positive
15	Negative	Positive	Positive	Positive	Negative	Positive	Positive	Positive
19	Negative	Positive	Positive	Positive	Negative	Positive	Positive	Positive
20	Negative	Positive	Positive	Positive	Negative	Positive	Positive	Positive
23	Negative	Positive	Positive	Positive	Negative	Positive	Positive	Positive
24	Negative	Positive	Positive	Positive	Negative	Positive	Positive	Positive
25	Negative	Positive	Positive	Positive	Negative	Positive	Positive	Positive
28	Equivocal	Positive	Positive	Positive	Negative	Positive	Positive	Positive
34	Negative	Positive	Positive	Positive	Negative	Positive	Positive	Positive
35	Negative	Positive	Positive	Positive				
38	Negative	Positive	Positive	Positive	Negative	Positive	Positive	Positive
39	Negative	Positive	Positive	Positive	Negative	Positive	Positive	Positive
41	Negative	Positive	Positive	Positive	Negative	Positive	Positive	Positive
42	Negative	Positive	Positive	Positive	Negative	Positive	Positive	Positive
45	Negative	Positive	Positive	Positive				
48	Negative	Positive	Positive	Positive	Negative	Positive	Positive	Positive
51	Negative	Positive	Positive	Positive	Negative	Positive	Positive	Positive
54	Negative	Positive	Positive	Positive	Negative	Positive	Positive	Positive
58	Negative	Positive	Positive	Positive	Equivocal	Positive	Positive	Positive
62	Negative	Positive	Positive	Positive	Negative	Positive	Positive	Positive
					Date Received	Date Tested	Comments	

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T-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B01/2016 (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	0.48	3.21	4.30	3.28	1.09	29.33			>1.5x trimmed mean	Median x (log)	70
11	65	242	315	585	76	183			>98 (2SD)	Median log channel	90
12	119	449	696	1382	114	348			Mean channel shift >50	MCF	
14	719	2414	2756	6038	642.5	4695			1.5x mean neg	Median log channel	
15	207.5	1025.5	1636.5	3197	173.5	7825					
	RMF 1.2	5.9	9.4	18.4					RMF >1.5	Median	100
19	0.351	2.54	2.013	6.534	0.275	5.81				Log median x	
20	0.496	2.06	4.26	7.64	0.424	1.29			≥40 linear channel shift	Median log channel	85
23	4.28	17.18	20.1	24.3	3.74	62.9			+3SD	MCF	
24	258.6	1562	1216	2524	199.5	7364, 768			1.2x Neg	MFCN	95
25	77	516	432	1549	66	1533			RMF >1.3	Median log channel	
28	1.9 (76)	6.8 (277)	6.1 (252)	10 (409)	41	1273			≥1.6	MFI (ratio)	.
34	4.6	13.4	13	24.8	4.45	23			+2SD (5.33)	Median FL1	
35	1.25	1.47	1.44	1.59	1.39	2.59			Mean +3SD	Median fluorescence units	
38	32	271.5	324.4	390.4	0	407.8			46 linear channel shift	Linear channel shift	95
39	0.16	0.56	0.7	1.31	0.16	2.83			>1.5 RMF	Median log fluorescence	
41	231	874	885	1812	216	8336			≥1.5 RMF	Median log channel shift	75
42	220	1130	968	2987	175		7170	355	RMF ratio >1.3	Median log channel	95
45	186	327	388	443	185	578			225 (≥40 channel shift)	Median channel value	
48	0.65	1.63	2.51	3.83	0.64	10.43			≥1.3 RMF	Median log channel	
51	5.45	19.19	16.4	47.41	5.46	176			7.86 (+2.4 shift)		95
54	300, 320	517, 520	487, 505	643, 630	270, 293, 297, 298, 292, 286	830			MESF ratio ≥1.5	Median channel shift	
58	1.44	5.73	3.91	14	1.3	6.09			1.69 (1.3x mean)	Log median	
62	0.586	4.34	10.5	4.4	0.48	34.16			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	797	7505	3572	3194	780	3401			>1248 (1.6 RMF)	Median log channel	90
12	1193	6899	4028	4564	1049	4025			Mean channel shift >50	MCF	
14	6125	18791	11232	14991	5949	26019			1.5x mean neg	Median log channel	
15	1395	12276	6834	8183	1764.5	15211					
	RMF 0.8	6.96	3.87	4.6					RMF >1.5	Median	100
19	6.741	24.956	18.058	20.936	5.483	26.808			Log median x		
20	5.14	37.8	30.5	29.9	3.95	8.22			≥40 linear channel shift	Median log channel	85
23	8.86	73.59	58.72	76.07	7.52	248			+2SD	MCF	
24	1948	16654	12127	7234	1951.5	35051, 3041			2x Neg	MFCN	95
25	834	8119	4774	5862	1103	5693			RMF >1.3	Median log channel	
28	1.4 (179)	13.8 (1827)	6.6 (874)	8.4 (1111)	132	1696			≥1.9	MFI (ratio)	.
34	41.9	120.3	96.2	90.3	36.4	113.5			+2SD (49.3)	Median FL1	
38	-43.6	189.8	135.2	164.3	0	300.2			63 linear channel shift	Linear channel shift	95
39	0.62	8.16	4.42	4.56	0.6	11.3			>2.0 RMF	Median log fluorescence	
41	1041	5959	3847	4148	983	112000			≥1.5 RMF	Median log channel shift	75
42	710	11081	5077	8000	597		24172	2358	RMF ratio >1.5	Median log channel	95
48	1.9	12.7	9.32	7.86	1.89	19.48			≥1.3 RMF	Median log channel	
51	12.24	79.98	54.55	84.68	14.97	296			21.47 (+6.5 shift)		95
54	583, 649, 644	802, 795, 796	716, 693, 705	737, 767, 748	560, 540, 588, 594, 561, 631	859			MESF ratio ≥1.5	Median channel shift	
58	6.37	38	25.3	39.13	4.85	27			6.31 (1.3x mean)	Log median	
62	6.16	47.3	41	47.1	2.93	91.6			RMF >1.5	Median log channel	99