

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

T-CELL AND B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B10/2016 (COMPARED TO LOCAL NEGATIVE CONTROL)

DISPATCHED ON 06TH SEPTEMBER 2016

HLA PHENOTYPE OF BLOOD DONOR: HLA-A24, A25; B8, B60; Cw7, Cw10; DR4, DR17; DQ4, DQ8

		Summary of Results										
		T-cells				B-cells						
Total tested	16	19	21	22	19	14	19	19				
Positive	12	5	0	1	19	8	19	1				
Negative	4	14	21	21	0	6	0	18				
NT/Equivocal	7	4	2	1	1	6	1	1				
% Positive	75.0%	26.3%	0.0%	4.5%	100.0%	57.1%	100.0%	5.3%				
% Negative	25.0%	73.7%	100.0%	95.5%	0.0%	42.9%	0.0%	94.7%				
<b>Consensus</b>	<b>Not Assessed*</b>	<b>Not Assessed</b>	<b>Negative</b>	<b>Negative</b>	<b>Positive</b>	<b>Not Assessed</b>	<b>Positive</b>	<b>Negative</b>				
HLA Antibody Specificity (Defined By CDC)	B12	A1	DR7, DQ2	A23	B12	A1	DR7, DQ2	A23				
		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	Positive	Equivocal	Negative	Negative					07-Sep	08-Sep		
11	Positive	Equivocal	Equivocal	Equivocal	Equivocal	Equivocal	Equivocal	Equivocal	07-Sep	09-Sep		
12	Negative	Negative	Negative	Negative	Positive	Negative	Positive	Negative	07-Sep	07-Sep		
14	Negative	Negative	Negative	Negative	Positive	Negative	Positive	Negative	07-Sep	07-Sep		
15	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	07-Sep	07-Sep		
19	Positive	Negative	Negative	Negative	Positive	Negative	Positive	Negative				
20	Positive	Negative	Negative	Negative	Positive	Positive	Positive	Negative	07-Sep	07-Sep		
23	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	07-Sep	07-Sep		
24	Equivocal	Negative	Negative	Negative	Positive	Positive	Positive	Negative	07-Sep	08-Sep		
25	Positive	Positive	Negative	Negative	Positive	Equivocal	Positive	Negative	08-Sep	08-Sep		
28	Equivocal	Equivocal	Equivocal	Negative	Positive	Equivocal	Positive	Negative	07-Sep	07-Sep		
34	Equivocal	Equivocal	Negative	Negative	Positive	Equivocal	Positive	Negative	09-Sep	09-Sep		
35	Equivocal	Negative	Negative	Negative					07-Sep	08-Sep		
38	Positive	Positive	Negative	Negative	Positive	Negative	Positive	Negative	07-Sep	07-Sep		
39	Negative	Negative	Negative	Negative	Positive	Negative	Positive	Negative	07-Sep	07-Sep		
41	Positive	Negative	Negative	Negative	Positive	Positive	Positive	Negative	07-Sep	07-Sep		
42	Positive	Negative	Negative	Negative	Positive	Positive	Positive	Negative	07-Sep	08-Sep		
45	Positive	Positive	Negative	Negative					07-Sep	08-Sep		
48	Negative	Negative	Negative	Negative	Positive	Positive	Positive	Negative	07-Sep	07-Sep		
51	Equivocal	Negative	Negative	Negative	Positive	Positive	Positive	Negative	07-Sep	09-Sep		
54	Positive	Positive	Negative	Negative	Positive	Equivocal	Positive	Negative	07-Sep	08-Sep		
58	Equivocal	Negative	Negative	Negative	Positive	Equivocal	Positive	Negative	07-Sep	07-Sep		
62	Equivocal	Negative	Negative	Negative	Positive	Positive	Positive	Negative	07-Sep	07-Sep		

\*Serum 1 Not Assessed despite reaching 75% consensus due to high number of equivocal reports

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T-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B10/2016 (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	1.0		0.7	0.7	0.60	9.6			>1.5x trimmed mean	Median x (log)	95
11	195	145	141	135	135, 132, 139, 138	194, 324			141.48 (mean +2SD)	Median log fluorescence	
12	102	95	84	81	80	196			Mean channel shift >50	MCF	
14	1071.5	1033.5	881	784	774.5	19323			1.5x mean Neg	Median log channel	
15	356	270	170	166	173.5	12942					
	RMF 2.05	1.56	0.98	0.96					RMF≥1.5	Median	
19	0.45	0.336	0.252	0.247	0.264	8.105				Log median x	
20	0.835	0.53	0.413	0.369	0.384	1.751			40 LCS	MCF	99
23	7.68	5.27	6.7	11.99	5.67	56.7			+3SD	MCF	
24	190	134	128	114	132	418, 1217			1.5x NEG	MFCN	95
25	88	75	55	52	54	1670			RMF >1.3	Median log channel	
28	153	121	125	112	74	1247			≥1.6-3 equivocal		
	2.1	1.7	1.7	1.5					>3.1 pos	MFI	90
34			2.71	2.56	3.34	35.35			2SD	MFI	90
35	2.6	1.97	1.72	1.5	1.45	5.18			1.68 3SD+ Mean Neg control	Median log channel	90
38	108.6	58.4	16.8	11.7	0	414.9			33	Linear channel shift	
39	0.19	0.16	0.14	0.14	0.15	2.66			>1.5 RMF	Median log fluorescence	
41	341	272	188	170	206.7	7243.7			RMF >1.6	Median channel	90
42	229	184	153	152	155		12625	324	RMF ratio >1.3	Median log channel	
45	256	244	199	188	190	599			40 channel shift (230)	Median channel value	
48	0.64	0.58	0.55	0.54	0.58	3.2			>1.29 RMF	Median log channel	
51	4.61	3.23	2.41	2.57	2.71	59.89			5.21		95
54	324, 330	322, 329	221, 185	170, 183	202, 192, 210, 203, 207	791			MESF test: neg ratio ≥1.2	Median channel shift	
58		1.01	0.96	0.98	1.34	5.88			2SD	Log median	
62	0.63	0.55	0.454	0.454	0.4333	1.11			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	Equivocal	Equivocal	Equivocal	Equivocal	Equivocal	Equivocal				Median log fluorescence	
12	490	176	485	130	119	792			Mean channel shift >50	MCF	
14	9759	3731	10655.5	2683.5	2649.5	70575.5			1.5x mean Neg	Median log channel	
15	6660	1949	5242	1019	1153	31659					
	RMF 5.78	1.69	4.55	0.88					RMF ≥1.5	Median	
19	15.912	5.126	13.669	3.74	2.974	67.098				Log median x	
20	37.35	7.04	27.18	2.08	2.37	8.74			40 LCS	Median Channel Fluorescence	99
23	54.36	15.2	48.27	53.31	12.31	94.7			+2SD	MCF	
24	4083	567	2225	229	244.5	815, 4887			2x NEG	MFCN	95
25	2824	667	7383	381	703	6424			RMF >1.3	Median log channel	
28	818	228	762	139	99	1279			≥2.0-3.5 equivocal		
	8.3	2.3	7.7	1.4					≥3.6 pos	MFI	90
34	56.27		42.97	15.53	20.48	160.5			2SD	MFI	90
38	126.4	14.9	78.7	-17.8	0	285.4			40	Linear Channel Shift	
39	4.13	0.98	3.22	0.45	0.51	8.17			>2.0 RMF	Median log fluorescence	
41	3152	1287	2666	497	540	15488.3			RMF >1.6	Median Channel	90
42	1927	521	1255	454	330		37309	1276	RMF ratio >1.5	Median log channel	
48	6.27	1.85	6.68	1.23	1.09	12.27			>1.29 RMF	Median log channel	
51	77.05	20.3	55.23	10.85	9.56	71.05			16.06		95
54	655, 642, 647	559, 555, 564	659, 638, 660	535, 543, 527	529, 521, 526, 523, 521	878			MESF test: neg ratio ≥1.2	Median channel shift	
58	21.4		17.67	2.24	6.27	43.2			1.5x mean	Log median	
62	19.1	4.52	16.20	2.86	1.22	38.3			RMF >3.0	Median log channel	99