

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

T-CELL AND B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B04/2018 UK (COMPARED TO LOCAL NEGATIVE CONTROL)

DISPATCHED ON 1ST MAY 2018

HLA PHENOTYPE OF BLOOD DONOR: HLA-A3, A-; B7, B35; Cw4, Cw7; DR7, DR15; DQ2, DQ6

	Summary of Results							
	T-cells				B-cells			
Total tested	22	22	22	22	20	20	20	20
Positive	1	1	22	14	20	2	20	20
Negative	20	21	0	7	0	18	0	0
Equivocal	1	0	0	1	0	0	0	0
NT	0	0	0	0	0	0	0	0
% Positive	4.5%	4.5%	100.0%	63.6%	100.0%	10.0%	100.0%	100.0%
% Negative	90.9%	95.5%	0.0%	31.8%	0.0%	90.0%	0.0%	0.0%
% Equivocal	4.5%	0.0%	0.0%	4.5%	0.0%	0.0%	0.0%	0.0%
<b>Consensus</b>	<b>Negative</b>	<b>Negative</b>	<b>Positive</b>	<b>Not Assessed</b>	<b>Positive</b>	<b>Negative</b>	<b>Positive</b>	<b>Positive</b>
HLA Antibody Specificity (Defined By CDC)	DQ2	A11	B7	A1	DQ2	A11	B7	A1

Lab No.	Assessment	T-cells				B-cells				Date Received	Date Tested	Comments
		Serum 1	Serum 2	Serum 3	Serum 4	Serum 1	Serum 2	Serum 3	Serum 4			
9	YES											
11	YES	YES										
14	YES	YES										
15	YES	YES										
19	YES	YES										
20	YES	YES										
23	YES	YES										
24	YES	YES										
25	YES	YES										
28	YES	YES										
34	YES	YES										
35	YES											
38	YES	YES										
39	YES	YES										
41	YES	YES										
42	YES	YES										
45	YES	YES										
48	YES	YES										
51	YES	YES										
54	YES	YES										
58	YES	YES										
62	YES	YES										

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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	0.96	0.73	4.02	0.59	0.83	12.80			>1.5 Trimmed mean	Median x (log)	90
11	159, 152	155, 158	902, 998	309, 302	138, 138, 153, 143	290, 2521			1.2x RMF of Negatives	Median Log Channel	
14	560	513	1371	609	483	6467			1.5x Mean Negative	Median Fluorescence	
15	301.5	259.5	1240	404	267.5	11863			RMF >1.5	Median	
19	0.244	0.268	1.488	0.496	0.25	5.81			-	Log Median x	
20	0.4955	0.5458	2.6175	1.105	0.4798	0.953			40 Linear Channel Shift	Median Channel Fluorescence	90
23	5.43	7.52	13.81	8.65	4.26	44.51			+3SD	Median Channel Fluorescence	
24	208	165	1026	310	237	NIBSC 355 local 1978			Ratio >1.5	MFCN	95
25	124	120	755	224	125	9551			RMF >1.2	Median Log Channel	
28	42 (1.7)	38 (1.5)	86 (3.4)	46 (1.8)	25	453			Pos >3.1 Equiv 1.6-3.0		99
34	4.49	4.14	10.87	4.97	4.31	33.75			2SD (5.23)	Median FL1	
35	1.75	2.01	16.87	4.9	1.82	58.19			Mean +3SD	Median Log Channel	90
38	57.4	18.4	228.1	144.3	0	459.8			33 Linear Channel Shift	Linear Channel Shift	90
39	0.18	0.17	0.5	0.23	0.17	0.9			>1.5 RMF	Median Log Fluorescence	
41	239	233	1100	373	211	8111			RMF >1.6	Median Fluorescence Intensity	95
42	0.87	1.05	2.98	0.97	1	64.42			>1.3	RMF	
45	228	221	347	250	214	565			40 Channel Shift (254)	Median Channel Value	
48	0.76	0.71	2.76	1.01	0.65	35.11			>1.3 RMF	Median	
51	4.84	4.81	35.5	8.66	4.47	23.93			6.98		
54	267, 267	244, 248	464, 465	331, 329	257, 260, 262, 252, 261, 241	752			Test/Neg MESF Ratio $\geq 1.2$ = Weak Pos	Median Channel Shift	
58	218	227	1154	380	153	1136			$\geq 1.5$ = Pos	Median Fluorescence	
62	0.505	0.487	2.73	0.772	0.422	6.335			1.5 Neg Mean	Log Median Fluorescence Intensity	99
									RMF >1.5		

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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	NT	NT	NT	NT	NT	NT				Median x (log)	90
11	10386, 9703	1301, 1389	3880, 4612	4396, 4663	1454, 1265, 1351, 1112	7772, 21071			1.5x RMF of Negatives	Median Log Channel	
14	6367.00	1362.00	2814.00	3710.00	1063.00	19443.00			1.5x Mean Negative	Median Fluorescence	
15	7250.00	508.00	2132.00	3394.00	633.50	22653.50			RMF >1.5	Median	
19	10.29	2.32	6.28	7.44	1.64	22.00			-	Log Median x	
20	18.59	1.52	11.42	12.25	1.92	3.98			40 Linear Channel Shift	Median Channel Fluorescence	90
23	16.90	12.86	17.90	24.59	9.33	69.16			+2SD	Median Channel Fluorescence	
24	2246.00	197.00	1639.00	1633.00	337.00	NIBSC 532 local 6663			Ratio >2.0	MFCN	95
25	6389.00	491.00	2248.00	2011.00	777.00	15287.00			RMF >1.3	Median Log Channel	
28	402 (12.4)	50 (1.6)	155 (4.8)	240 (7.4)	32.00	624.00			Pos >= 3.6 Equiv 2.0-3.5		99
34	42.63	4.73	14.43	20.30	4.63	47.15			2SD (5.35)	Median FL1	
35	NT	NT	NT	NT	NT	NT				Median Log Channel	90
38	188.40	6.80	92.30	130.50	0.00	343.90			40 Linear Channel Shift	Linear Channel Shift	90
39	3.75	0.36	1.12	1.56	0.32	4.43			>2.0 RMF	Median Log Fluorescence	
41	4819.00	495.00	1641.00	2207.00	591.00	14649.00			RMF >1.6	Median Fluorescence Intensity	95
42	4.40	1.00	5.04	2.81	1.00	122.69			>1.5	RMF	
45	580	378	480	515	393	754			40 Channel Shift (433)	Median Channel Value	
48	20.02	1.54	6.16	10.06	0.91	64.15			1.3 RMF	Median	
51	82.2	4.76	37.76	45.75	4.98	32.49			11.49		
54	679, 681	516, 525	628, 620	626, 629	535, 538, 535, 530, 538, 535	846			Testing/Neg MESF Ratio ≥1.2 = Weak pos ≥1.5 = pos	Median Channel Shift	
58	6179	603	2530	2439	245	6448			2.5 Neg Mean	Median Fluorescence	
62	23.1	0.98	7.31	8.99	0.711	42.65			RMF >3.0	Log Median Fluorescence Intensity	99