

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

T-CELL AND B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B05/2018 UK (COMPARED TO LOCAL NEGATIVE CONTROL)

DISPATCHED ON 10 JUN 2018

HLA PHENOTYPE OF BLOOD DONOR: HLA-A2, A31; B44, B60; Cw5, Cw10; DR4, DR-; DQ7, DQ8

		Summary of Results										
		T-cells				B-cells						
Total tested		22	22	22	22	20	19	19	19			
Positive		18	0	22	0	20	1	19	0			
Negative		2	22	0	22	0	18	0	19			
Equivocal		2	0	0	0	0	0	0	0			
NT		0	0	0	0	0	1	1	1			
% Positive		81.8%	0.0%	100.0%	0.0%	100.0%	5.3%	100.0%	0.0%			
% Negative		9.1%	100.0%	0.0%	100.0%	0.0%	94.7%	0.0%	100.0%			
% Equivocal		9.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
<b>Consensus</b>		<b>Positive</b>	<b>Negative</b>	<b>Positive</b>	<b>Negative</b>	<b>Positive</b>	<b>Negative</b>	<b>Positive</b>	<b>Negative</b>			
HLA Antibody Specificity (Defined By CDC)		Cw5 Cw6	A1	Multi	Negative	Cw5 Cw6	A1	Multi	Negative			
		T-cells				B-cells						
Lab No.	Assessment T-cells B-cells	Serum 1	Serum 2	Serum 3	Serum 4	Serum 1	Serum 2	Serum 3	Serum 4	Date Received	Date Tested	Comments
9	YES	Positive	Negative	Positive	Negative					11-Jul	12-Jul	
11	YES YES	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	12-Jul	
14	YES YES	Positive	Negative	Positive	Negative	Positive	NT	Positive	Negative	11-Jul	11-Jul	Failed duplicates for sample 2 B cells. Unable to re-run assay.
15	YES YES	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	11-Jul	
19	YES YES	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	11-Jul	
20	YES YES	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	12-Jul	
23	YES YES	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	11-Jul	
24	YES YES	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	12-Jul	
25	YES YES	Negative	Negative	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	11-Jul	
28	YES YES	Equivocal	Negative	Positive	Negative	Positive	Negative	NT	NT	11-Jul	11-Jul	B cell serum 3 and 4 not reported as cell number too low for valid result.
34	YES YES	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	11-Jul	
35	YES	Positive	Negative	Positive	Negative					11-Jul	12-Jul	
38	YES YES	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	11-Jul	
39	YES YES	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	11-Jul	
41	YES YES	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	12-Jul	12-Jul	
42	YES YES	Negative	Negative	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	11-Jul	
45	YES YES	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	10-Jul	11-Jul	
48	YES YES	Equivocal	Negative	Positive	Negative	Positive	Negative	Positive	Negative	12-Jul	12-Jul	T cell for serum 1 is reported as equivocal due to borderline results near the cut-off of >2.3
51	YES YES	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	12-Jul	Very poor and few B cells
54	YES YES	Positive	Negative	Positive	Negative	Positive	Positive	Positive	Negative	11-Jul	12-Jul	
58	YES YES	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	11-Jul	
62	YES YES	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	11-Jul	

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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	3.00	0.39	5.30	0.60	0.95	32.10			>1.5 x trimmed mean	median x (log)	90
11	668, 658	130, 149	2212, 2532	209, 222	228, 245, 178, 153	1022, 9176			1.2 RMF of negatives	median log channel	
14	1698	1072	4911	1045	1044	9294			1.5 x mean negative	median fluorescence	
15	3.2	0.99	18	1.05	80	94.9			RMF >1.5	RMF	
19	0.552	0.222	3.068	0.219	0.225	11.719				log median x	
20	1.109	0.352	5.988	0.341	0.389	1.162			40 linear channel shift	median channel fluorescence	90
23	7.14	3.7	34.13	4.81	4.77	53.28			+3 SD	median channel fluorescence	
24	415.7	145.3	2966.7	200.7	198.5	3673.5, 662.5			relative ratio > 1.5	MFCN	95
25	340	212	1587	252	269	5815			RMF >1.2	median log channel	
28	88 (2.6)	51 (1.5)	274 (8.1)	46 (1.4)	34	1090			ratio neg:pos >= 3.1 Equiv 1.6-3.0	MFI	95
34	15.6	7.5	27.2	7.7	8.1	76.7			2SD	MFI	
35	6.09	2.52	30.14	1.55	2.58	88.78			mean +3 SD	median log channel	
38	119.2	-6.3	339.6	-2.8	0	439.3			33 linear channel shift	linear channel shift	90
39	0.24	0.11	1.54	0.1	0.1	4.06			>1.5 relative mean fluorescence	median log fluorescence	
41	350	177	1869	175	165	1440			RMF >1.6	median fluorescence	85
42	1.06	0.72	5.92	0.73	1	48.49			>1.3	RMF	
45	231	154	390	151	148	587			40 channel shift (188)	median channel value	
48	0.77	0.34	4.9	0.35	0.33	24.88			>2.3	median	
51	6.62	2.68	36.34	3.38	3.26	158			5.76 (2.5 channel shift)		90
54	330, 332	182, 173	530, 528	191, 183	181, 190, 184, 188, 177, 182	796			test:neg MESF ratio > or same as 1.2 =wk pos, > or same as 1.5 = pos	median channel shift	
58	277	144	1234	145	144	955			1.5 mean	median	90
62	0.848	0.318	4.71	0.322	0.29	16.35			>x1.5 negative control	MFI	90

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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	8582, 9093	479, 515	11362, 11872	520, 459	600, 554, 508, 552	7160, 14763			1.5 RMF of negatives	median log channel	
14	13932		20466	4094	2874	50763			1.5 x mean negative RMF >1.5	median fluorescence RMF	
15	7.7	0.57	10.6	0.54	451	24.6				log median x	
19	24.069	5.032	24.204	3.391	3.742	55.549			40 linear channel shift +2SD	median channel fluorescence	90
20	29.59	2.41	37.68	1.132	1.844	4.147				median channel fluorescence	
23	113.6	10.9	238.5	10.9	10.2	122.9			relative ratio >2.0	MFCN	95
24	6298.3	287.3	12042.7	390.7	485	702.5, 2289.5					
25	4286	319	7545	357	546	13384			RMF >1.3	median log channel	
28	731 (15.5)	67 (1.4)			47	1134			ratio neg:pos >/= 3.6 equiv: 2.0-3.5 2SD	MFI	95
34	27.4	2.2	29.1	2.4	4.1	26.7				MFI	
38	127.9	-15.3	186.5	6	0	263.1			40 linear channel shift >2.0 RMF	linear channel shift	90
39	5.95	0.45	8.3	0.29	0.38	11.85				median log fluorescence	
41	5710	531	9908	474	469	19536			RMF >1.6	median fluorescence	85
42	5.99	0.73	13.47	0.5	1	66.81			>1.5	RMF	
45	554	365	580	352	372	735			40 channel shift (412)	median channel value	
48	10.24	0.89	19.14	0.88	0.81	33.36			>2.3	median	
51	79.4	2.75	186.9	3.78	2.55	110			9.05 (5 channel shift)		90
54	651, 649, 643	508, 481, 483	666, 676, 681	370, 326, 332	362, 373, 380, 371, 380	868			test:neg MESF ratio > or same as 1.2= wk pos, > or same as 1.5 = pos	median channel shift	
58	4616	558	7445	303	374	2509			2.5 mean	median	90
62	21.5	1.55	27.7	0.842	0.948	91.15			>x3 negative control	MFI	90