

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

T-CELL AND B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B06/2018 UK (COMPARED TO LOCAL NEGATIVE CONTROL)

DISPATCHED ON 10 JULY 2018

HLA PHENOTYPE OF BLOOD DONOR: HLA-A11, A33; B18, B51; Cw12, Cw15; DR7, DR11; DQ7, DQ9

		Summary of Results										
		T-cells				B-cells						
Total tested		22	22	22	22	20	20	20	20			
Positive		4	0	18	22	3	0	20	20			
Negative		18	22	2	0	16	20	0	0			
Equivocal		0	0	2	0	1	0	0	0			
NT		0	0	0	0	0	0	0	0			
% Positive		18.2%	0.0%	81.8%	100.0%	15.0%	0.0%	100.0%	100.0%			
% Negative		81.8%	100.0%	9.1%	0.0%	80.0%	100.0%	0.0%	0.0%			
% Equivocal		0.0%	0.0%	9.1%	0.0%	5.0%	0.0%	0.0%	0.0%			
<b>Consensus</b>		<b>Negative</b>	<b>Negative</b>	<b>Positive</b>	<b>Positive</b>	<b>Negative</b>	<b>Negative</b>	<b>Positive</b>	<b>Positive</b>			
HLA Antibody Specificity (Defined By CDC)		A1	Negative	Cw5 Cw6	Multi	A1	Negative	Cw5 Cw6	Multi			
		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	Negative	Negative	Positive	Positive					11-Jul	12-Jul	
11	YES YES	<b>Positive</b>	Negative	Positive	Positive	<b>Positive</b>	Negative	Positive	Positive	11-Jul	12-Jul	
14	YES YES	Negative	Negative	Positive	Positive	Negative	Negative	Positive	Positive	11-Jul	11-Jul	
15	YES YES	Negative	Negative	Positive	Positive	Negative	Negative	Positive	Positive	11-Jul	11-Jul	
19	YES YES	Negative	Negative	Positive	Positive	Negative	Negative	Positive	Positive	11-Jul	11-Jul	
20	YES YES	<b>Positive</b>	Negative	Positive	Positive	<b>Positive</b>	Negative	Positive	Positive	11-Jul	12-Jul	
23	YES YES	Negative	Negative	Positive	Positive	Negative	Negative	Positive	Positive	11-Jul	11-Jul	
24	YES YES	Negative	Negative	Positive	Positive	Negative	Negative	Positive	Positive	11-Jul	12-Jul	
25	YES YES	Negative	Negative	<b>Negative</b>	Positive	Negative	Negative	Positive	Positive	11-Jul	11-Jul	
28	YES YES	Negative	Negative	<b>Equivocal</b>	Positive	<b>Equivocal</b>	Negative	Positive	Positive	11-Jul	11-Jul	
34	YES YES	Negative	Negative	Positive	Positive	Negative	Negative	Positive	Positive	11-Jul	11-Jul	
35	YES	Negative	Negative	Positive	Positive					11-Jul	12-Jul	
38	YES YES	<b>Positive</b>	Negative	Positive	Positive	Negative	Negative	Positive	Positive	11-Jul	11-Jul	
39	YES YES	Negative	Negative	Positive	Positive	Negative	Negative	Positive	Positive	11-Jul	11-Jul	
41	YES YES	Negative	Negative	Positive	Positive	Negative	Negative	Positive	Positive	12-Jul	12-Jul	
42	YES YES	Negative	Negative	Positive	Positive	Negative	Negative	Positive	Positive	11-Jul	11-Jul	
45	YES YES	Negative	Negative	Positive	Positive	Negative	Negative	Positive	Positive	10-Jul	11-Jul	
48	YES YES	Negative	Negative	<b>Equivocal</b>	Positive	Negative	Negative	Positive	Positive	12-Jul	12-Jul	T cell serum 3 reported as equivocal as results are borderline and near the cut-of of 2.3
51	YES YES	Negative	Negative	<b>Negative</b>	Positive	Negative	Negative	Positive	Positive	11-Jul	12-Jul	Very poor cells
54	YES YES	<b>Positive</b>	Negative	Positive	Positive	<b>Positive</b>	Negative	Positive	Positive	11-Jul	12-Jul	
58	YES YES	Negative	Negative	Positive	Positive	Negative	Negative	Positive	Positive	11-Jul	12-Jul	
62	YES YES	Negative	Negative	Positive	Positive	Negative	Negative	Positive	Positive	11-Jul	11-Jul	

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T-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B06/2018 (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	0.94	0.61	1.97	5.08	0.92	7.20			1.5 x trimmed mean	median x (log)	90
11	138, 141	108, 118	315, 310	1577, 1530	101, 99, 104, 106	222, 3628			1.2 RMF of negatives	median log channel	
14	1051	815	1393	4336	763	2327			1.5 x mean negative	median fluorescence	
15	1.45	1	2.5	12.8	80.5	4230.5			RMF >1.5	RMF	
19	0.218	0.286	0.548	1.987	0.211	2.428				log median x	
20	0.8	0.458	1.655	7.277	0.412	1.773			40 linear channel shift	median channel fluorescence	90
23	3.74	3.85	6.98	31.82	3.49	33.38			+3SD	median channel fluorescence	
24	409.3	289	722	2359	298.5	2304, 517.5			relative ratio >1.5	MFCN	95
25	237	214	314	1233	236	3335			RMF >1.2	median log channel	
28	56 (1.5)	57 (1.5)	75 (2.0)	193 (5.1)	38	568			ratio >/= 3.1 equiv 1.6-3.0	median fluorescence intensity	90
34	4.4	7.5	14.2	24.9	5.7	103			2SD	MFI	
35	3.96	2.26	6.76	14.64	2.39	83.26			mean +3SD	median log channel	90
38	40.4	-19.4	96.4	297.6	0	475.8			3 linear channel shift	linear channel shift	90
39	0.13	0.11	0.28	1.01	0.11	0.69			>1.5 relative mean fluorescence	median log fluorescence	
41	236	152	309	911	150	5189			RMF >1.6	median fluorescence	80
42	1.12	1.15	1.52	5.71	1	108.49			>1.3	RMF	
45	175	146	214	357	150	501			0 channel shift (190)	median channel value	
48	0.55	0.46	0.84	3.47	0.38	5.84			>2.3	median	
51	3.57	1.43	3.71	26.37	2.84	72.9			34 (2.5 channel shift)		
54	276, 275	190, 185	339, 327	488, 487	176, 185, 194, 187, 177, 190	841			test:neg MESF ratio > or equal to 1.2 = wk pos, > or same as 1.5 = pos	median channel shift	
58	165	151	260	879	145	935			1.5 mean	median	90
62	0.495	0.356	0.895	3.845	0.342	1.251			> x 1.5 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	624, 694	324, 354	4013, 4260	11930, 11745	332, 326, 377, 396	11791, 27197			1.5 RMF of negatives	median log channel	
14	3748	3052	7834	18981	2575	57552			1.5 x mean negative RMF >1.5	median fluorescence RMF	
15	0.91	0.62	4.05	13.52	380	17278				log median x	
19	2.960	4.922	14.874	20.807	3.387	48.976			40 linear channel shift +2SD	median channel fluorescence	90
20	3.88	1.41	20.755	47.49	2.712	7.092				median channel fluorescence	
23	7.73	7.1	30.72	155.8	9.67	138.24			relative ratio >2.0	MFCN	95
24	517	345.3	1526	4534.7	432.5	3720, 1157.5			RMF >1.3	median log channel	
25	402	317	792	6158	491	9782			ratio >= 3.6 equiv: 2.0-3.5	median fluorescence intensity	90
28	82 (2.1)	61 (1.6)	286 (7.3)	740 (19.0)	39	725			2 SD	MFI	
34	3.3	2.1	11	12.5	2.5	18.1			40 linear channel shift	linear channel shift	90
38	18.5	13	95.9	209.7	0	340.5			> 2.0 relative mean fluorescence	median log fluorescence	
39	0.56	0.32	2.2	6.65	0.38	8.79			RMF >1.6	median fluorescence	80
41	618	426	2571	8431	535	11310			>1.5	RMF	
42	0.92	0.83	2.48	15.72	1	155.47			40 linear channel shift	median channel value	
45	372	347	491	569	372	738			>2.3	median	
48	3.08	2.73	7.82	17.63	1.48	20.49			9.24 (5 channel shift)		
51	7.34	1.37	30.7	131.3	2.74	74.99			tets:neg MESF ratio > or equal to 1.2 = wkpos, > or same as 1.5 = pos	median channel shift	
54	440, 412, 422	313, 334, 328	566, 562, 548	681, 673, 673	353, 340, 337, 347, 336, 337	920					
58	692	291	2301	7763	395	6272			2.5 mean	median	
62	2.135	0.777	11.05	27.85	1.020	41.3			>x3 negative control	MFI	90