

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

T-CELL AND B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B08/2016 (COMPARED TO LOCAL NEGATIVE CONTROL)

DISPATCHED ON 12TH JULY

HLA PHENOTYPE OF BLOOD DONOR: HLA-A2, A25; B18, B44; Cw12, Cw16; DR1, DR7; DQ2, DQ5

Summary of Results											
T-cells					B-cells						
Total tested	23	22	23	23	20	15	20	17			
Positive	0	6	23	0	2	5	20	6			
Negative	23	16	0	23	18	10	0	11			
NT/Equivocal	0	1	0	0	0	5	0	3			
% Positive	0.0%	27.3%	100.0%	0.0%	10.0%	33.3%	100.0%	35.3%			
% Negative	100.0%	72.7%	0.0%	100.0%	90.0%	66.7%	0.0%	64.7%			
Consensus	Negative	Not Assessed	Positive	Negative	Negative	Not Assessed	Positive	Not Assessed			
HLA Antibody Specificity (Defined By CDC)	B7,B27,B42,Cw1	A1	B12	Cw5, DR4	B7,B27,B42,Cw1	A1	B12	Cw5, DR4			
T-cells					B-cells						
Lab No.	Serum 1	Serum 2	Serum 3	Serum 4	Serum 1	Serum 2	Serum 3	Serum 4	Date Received	Date Tested	Comments
9	Negative	Negative	Positive	Negative					13-Jul	14-Jul	B cell positive control failure. If had been patient results testing would have been repeated
11	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	14-Jul	14-Jul	
12	Negative	Positive	Positive	Negative	Negative	Positive	Positive	Positive	13-Jul	13-Jul	
14	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	13-Jul	14-Jul	
15	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Positive	13-Jul	13-Jul	
19	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	13-Jul	14-Jul	
20	Negative	Negative	Positive	Negative	Positive	Positive	Positive	Negative	13-Jul	14-Jul	
23	Negative	Negative	Positive	Negative	Negative	Equivocal	Positive	Negative	13-Jul	13-Jul	
24	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	13-Jul	14-Jul	
25	Negative	Positive	Positive	Negative	Negative	Equivocal	Positive	Negative	13-Jul	14-Jul	
28	Negative	Equivocal	Positive	Negative	Negative	Equivocal	Positive	Equivocal	14-Jul	14-Jul	
34	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	14-Jul	14-Jul	
35	Negative	Positive	Positive	Negative					12-Jul	13-Jul	
38	Negative	Positive	Positive	Negative	Negative	Negative	Positive	Negative	13-Jul	13-Jul	
39	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	13-Jul	13-Jul	
41	Negative	Negative	Positive	Negative	Negative	Positive	Positive	Positive	13-Jul	13-Jul	
42	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Positive	13-Jul	14-Jul	
45	Negative	Positive	Positive	Negative					13-Jul	14-Jul	
48	Negative	Negative	Positive	Negative	Negative	Positive	Positive	Positive	13-Jul	13-Jul	
51	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	13-Jul	15-Jul	
54	Negative	Positive	Positive	Negative	Negative	Equivocal	Positive	Equivocal	13-Jul	14-Jul	
58	Negative	Negative	Positive	Negative	Negative	Equivocal	Positive	Equivocal	13-Jul	13-Jul	
62	Negative	Negative	Positive	Negative	Positive	Positive	Positive	Positive	13-Jul	13-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	1.8	1.7	26.5	1.3	1.70	41.7			>1.5 x trimmed mean	Median x (log)	95
11	56	69	736	66	75, 64, 64, 60	232, 610			76.92 (Mean + 2SD)	Median log fluorescence	
12	106	150	1079	133	109	6313			Mean channel shift >50	Mean channel fluorescence (MCF)	NT
14	489	638	2944.5	512	454	10856.5			1.5 x mean Neg	Median log channel	
15	190	354	3349.5	219	235	23078			RMF >1.5	Median	
	0.81	1.51	14.25	0.93						RMF	
19	0.242	0.33	4.898	0.231	0.328	15.769				Log median x	
20	0.501	0.746	9.791	0.812	0.59775	24.1			40 LCS	Median channel fluorescence	90
23	3.27	4.2	38.55	4.76	3.34	62.6			+3 SD	Median channel fluorescence	
24	128	186	1265	143	158	1695, 605			1.5 x negative	MFCN	90
25	68	111	1403	64	73	3338			RMF >1.3	Median log channel	
28	101	120	405	88	70	747			≥1.6 - 3 equiv.	Median fluorescence intensity	
	1.4	1.7	5.8	1.3					>3.1 Pos		
34	11.93	11.57	76.33	10.47	12.36	163			13.8	Median FL1	90
35	2.03	2.34	15.31	2.17	2.03	6.07			2.29 3SD + mean negative control	Median log channel	90
38	0	67	360	16	0	167			46	Linear channel shift	
39	0.15	0.17	1.86	0.15	0.15	4.09			>1.5 RMF	Median log fluorescence	
41	190	274	2167	193	202	15452			RMF ≥1.5	Median log channel	95
42	148	176	1126	164	152		8128	251	Rmf ratio >1.3	Median log channel	95
45	172	239	450	184	186	596			40 channel shift (226)	Median channel value	
48	0.59	0.74	4.05	0.61	0.61	11.12			>1.3 RMF	Median log channel	
51	4.57	5.02	44.14	2.99	2.99	192			5.49		
54	205, 204	285, 294	547, 535	199, 211	209, 213, 207, 209, 218	826			MESF test: neg ratio ≥1.2	Median channel shifts	
58	1.5	1.55	8.7	1.46	1.35	7.12			1.76	Log median	
62	0.4	0.5	7.5	0.5	0.4	18.9			>1.5	Median log channel	95

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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	559	641	3189	685	483, 405, 512	3153, 5609			747 (1.6 RMF)	Median log fluorescence	
12	297	496	2179	859	263	12340			Mean channel shift >50	Mean channel fluorescence (MCF)	NT
14	2142.5	2574.5	7497	2914	2254.5	17656			1.5 x mean Neg	Median log channel	
15	1287	2199.5	7796	2378	1484.5	41781			RMF >1.5	Median RMF	
19	4.377	5.078	21.706	6.139	3.562	60.777				Log median x	
20	3.481	5.064	14.456	0.761	2.381	0.101			40 LCS	Median channel fluorescence	90
23	20.62	23.29	153.23	26.8	16.5	151.2			+2SD	Median channel fluorescence	
24	357	1206	3129	584	644	5778, 1600			2 x negative	MFCN	90
25	570	747	3700	505	626	9297			RMF >1.3	Median log channel	
28	97	137	787	146	52	898			≥ 2.0 - 3.5 equiv.	Median fluorescence intensity	
34	1.9	2.6	15.1	2.8					≥ 3.6 Pos		
34	9.19	9.89	37.87	10.18	9.76	73.4			13.23	Median FL1	90
38	38	34	193	53	0	187			63	Linear channel shift	
39	0.67	0.9	5.38	1.01	0.74	12.65			>2.0 RMF	Median log fluorescence	
41	695	1092	4608	1025	601	30022			RMF ≥1.5	Median log channel	95
42	277	370	2535	598	315		37173	1563	RMF ratio >1.5	Median log channel	95
48	1.3	1.94	8.34	2.11	1.16	20.63			>1.3 RMF	Median log channel	
51	9.32	8.11	27.54	9.12	5.54	31.09			12.04		
54	498, 503, 489	517, 518, 509	654, 645, 646	530, 527, 536	493, 492, 490, 493, 496, 493	902, 802			MESF test:neg ratio ≥1.2	Median channel shifts	
58	4.99	7.72	31.1	7.62	5.46	42.6			8.19	Log median	
62	5.1	6.90	25.40	8.60	1.60	87.5			>2.5	Median log channel	95