

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

T-CELL AND B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B06/2015 (COMPARED TO LOCAL NEGATIVE CONTROL)

DISPATCHED ON 12TH MAY 2015

HLA PHENOTYPE OF BLOOD DONOR: HLA-A1, A23; B8, B44; Cw4, Cw7; DR17, DR7; DQ2, -

Summary of Results												
T-cells					B-cells							
Total tested	23	21	22	21	20	19	19	20				
Positive	7	20	4	20	2	6	2	20				
Negative	16	1	18	1	18	13	17	0				
NT/Equivocal	0	2	1	2	0	1	1	0				
% Positive	30.4%	95.2%	18.2%	95.2%	10.0%	31.6%	10.5%	100.0%				
% Negative	69.6%	4.8%	81.8%	4.8%	90.0%	68.4%	89.5%	0.0%				
Consensus	Not Assessed	Positive	Negative	Positive	Negative	Not Assessed	Negative	Positive				
HLA Antibody Specificity (Defined By CDC)	Cw3	A11	Cw5, DR4	DR3	Cw3	A11	Cw5, DR4	DR3				
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	Positive	Negative	Negative					13-May	13-May		
11	Positive	Positive	Positive	Positive	Negative	Negative	Negative	Positive	13-May	14-May		
12	Negative	Positive	Negative	Positive	Negative	Positive	Negative	Positive	14-May	14-May		
14	Negative	Positive	Negative	Positive	Negative	Negative	Negative	Positive	13-May	13-May		
15	Negative	Positive	Negative	Positive	Negative	Negative	Negative	Positive	13-May	13-May		
19	Negative	Positive	Negative	Positive	Negative	Negative	Negative	Positive	13-May	13-May		
20	Positive	Positive	Negative	Positive	Negative	Negative	Negative	Positive	13-May	14-May	B-cell positive control did not reach 60 linear channel shift. Would be repeated in clinical setting	
23	Positive	Positive	Positive	Positive	Negative	Positive	Positive	Positive	13-May	13-May		
24	Positive	Positive	Negative	Positive	Negative	Positive	Negative	Positive	13-May	14-May	Lot of granulocytes in preparation	
25	Negative	Positive	Negative	Positive	Negative	Negative	Negative	Positive	13-May	13-May		
28	Weak Positive	Weak Positive	Weak Positive	Weak Positive	Negative	Negative	Negative	Positive	13-May	13-May		
34	Negative	Equivocal	Negative	Equivocal	Negative	Equivocal	Negative	Positive	13-May	13-May		
35	Negative	Equivocal	Negative	Equivocal					13-May	14-May		
38	Positive	Positive	NT	Positive	Negative	Negative	NT	Positive	13-May	14-May	NT - Test failure	
39	Negative	Positive	Negative	Positive	Negative	Positive	Negative	Positive	13-May	14-May		
41	Positive	Positive	Positive	Positive	Positive	Positive	Positive	Positive	13-May	13-May		
42	Negative	Positive	Negative	Weak Positive	Negative	Negative	Negative	Weak Positive	13-May	14-May		
45	Negative	Positive	Negative	Positive					13-May	14-May		
48	Negative	Positive	Negative	Positive	Negative	Negative	Negative	Positive	13-May	14-May		
51	Negative	Positive	Negative	Positive	Positive	Positive	Negative	Positive	13-May	14-May		
54	Negative	Positive	Negative	Positive	Negative	Negative	Negative	Positive	13-May	14-May		
58	Negative	Negative	Negative	Positive	Negative	Negative	Negative	Positive	13-May	13-May		
62	Negative	Positive	Negative	Positive	Negative	Negative	Negative	Positive	13-May	13-May		

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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	FCXM NIBSC negative control used?	Viability (%)
9	0.42	3.23	0.38	0.33	1.80	54.04			> 1.5 x trimmed mean	Median x (log)	Yes	90
11	66	76	64	101	53	102			2SD (>54.63)		No	95
12	148	224	152	191	125	176			Average MCF of Neg. con. + 1SD	Median Channel Fluorescence	No	
14	608	898	558	874	502	3056			1.5 x negative	Median Channel Fluorescence	Yes	
15	Median 254	512	241	358	210.5	15965			RMF > 1.5	Median	No	95
	RMF 1.2	2.4	1.1	1.7		75.8				RMF	No	
19	0.286	0.434	0.273	0.508	0.246	5.123				Log Median x	No	
20	0.674	0.888	0.587	0.913	0.415	1.955			40 linear channel shift	Median Channel Fluorescence	No	90
23	8.63	5.96	5.08	5.51	4.45	35.55			+ 3SD	Median Channel Fluorescence	Yes	
24	266	309	196	264	178		7649	592	> 1.5 RR	MFCN	Yes	90
25	84	130	78	149	67	4712			> 1.3 RMF	Median Log Channel	Yes	
28	97	134	101	143	58	1315			Ratio above 1.5 compared to neg. con.	MFI	No	90
34	8.69	9.02	7.28	8.93	8.40	15.50			Mean + 2SD (8.70)		No	95
35	2.11	2.76	1.68	2.70	1.73	4.5			2.67 3SD	Median Log Channel	Yes	
38	50.4	93.5	NT	92.4	0	431.6			46 linear channel shift	Linear Channel Shift	Yes	
39	0.21	0.27	0.20	0.31	0.18	8.87			≥ 1.5 RMF	Median Log Fluorescence	No	
41	1976	1106	429	459	162	5926			RMF ≥ 1.5	Median Log Channel	No	
42	251	408	236	306	223		11710	NT	RMF ratio > 1.3	Median Log Channel	No	
45	243	295	250	279	230	662			≥ 270 (≥ 40 channel shift)	Median Channel Value	Yes	
48	0.57	0.76	0.60	0.72	0.48	7.28			≥ 1.3 RMF		Yes	
51	6.15	7.99	4.83	9.14	4.43	326			6.43		No	
54	328/318	398/398	308/307	406/405	284/284/289	842			Test neg MESF ratio ≥ 1.2 weak positive	Median Log Channel	No	
									Test neg MESF ratio ≥ 1.5 positive			
58	3.3	3.96	3.63	12.1	4.22	23.4			1.5 x mean = 6.33	Log Median	Yes	
62	0.531	0.686	0.517	0.6985	0.412	2.12			RMF > 1.5	Median Log Channel	Yes	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	FCXM NIBSC negative control used?	Viability (%)
11	477	539	575	1167	474.67	3093			1.6 RMF (>759.47)		No	95
12	1361	1565	1430	2182	1203	2265			Average MCF of neg. con. + 1SD	Median Channel Fluorescence	No	
14	3750	4036	3575	6515	3415	13561			1.5 x negative	Median Channel Fluorescence	Yes	
15	Median 1624 RMF 0.9	2160 1.2	1913 1.06	4432 2.5	1804	29892 16.6			RMF > 1.5	Median RMF	No	95
19	6.386	7.245	6.710	10.336	6.386	47.673				Log Median x	No	
20	7.043	6.720	6.915	15.595	6.233	9.990			40 linear channel shift	Median Channel Fluorescence	No	90
23	12.82	20.64	18.49	22.93	10.97	82.05			+ 2SD	Median Channel Fluorescence	Yes	
24	565	756	463	1049	493		25469	1383	> 1.55 RR	MFCN	Yes	90
25	852	926	683	2134	1043	8571			> 1.3 RMF	Median Log Channel	Yes	
28	273	331	324	660	212	1827			Ratio above 2 compared with neg. con.	MFI	No	50
34	35.53	39.23	35.36	51.17	29.65	91.93			Mean + 2SD (39.14)		No	90
38	-0.4	4.6	NT	77.6	0	199			63 linear channel shift	Linear Channel Shift	Yes	
39	1.28	3	1.59	3.63	1.45	17.30			≥ 2.0 RMF	Median Log Fluorescence	No	
41	2657	1701	969	2738	496	9044			RMF ≥ 1.5	Median Log Channel	No	
42	1438	1888	1555	2994	1886		38281	3410	RMF ratio > 1.5	Median Log Channel	No	
48	3.13	3.27	2.93	6.08	2.65	16.81			≥ 1.3 RMF		Yes	
51	52.8	49.1	38.9	93.9	37.3	358			42.3		No	
54	546/536/536	544/561/558	554/555/555	635/637/637	558/566/567	845			Test neg MESF ratio ≥ 1.2 weak positive Test neg MESF ratio ≥ 1.5 positive	Median Log Channel	No	
58	1.06	1.22	1.03	1.43	0.88	5.67			1.5 x mean = 1.32	Log Median	Yes	
62	2.7	3.375	2.85	9.28	2.18	22.7			RMF > 3	Median Log Channel	Yes	99