

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

T-CELL AND B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B09/2018 UK (COMPARED TO LOCAL NEGATIVE CONTROL)

DISPATCHED ON 11TH DECEMBER 2018

HLA PHENOTYPE OF BLOOD DONOR: HLA-A2, A11; B7, B27; Cw2, Cw7; DR1, DR4; DQ5, DQ8

		Summary of Results											
		T-cells				B-cells							
Total tested		19	18	19	19	16	15	16	16				
Positive		15	4	3	2	16	15	15	16				
Negative		2	14	16	16	0	0	1	0				
Equivocal		2	0	0	1	0	0	0	0				
NT		3	4	3	3	4	5	4	4				
% Positive		78.9%	22.2%	15.8%	10.5%	100.0%	100.0%	93.8%	100.0%				
% Negative		10.5%	77.8%	84.2%	84.2%	0.0%	0.0%	6.3%	0.0%				
% Equivocal		10.5%	0.0%	0.0%	5.3%	0.0%	0.0%	0.0%	0.0%				
Consensus		Positive	Negative	Negative	Negative	Positive	Positive	Positive	Positive				
HLA Antibody Specificity (Defined By CDC)		Cw5 Cw6	A1 B8 DR4+	A10 A28 B8 DR4+	A3 A19 A24 B12+ DR4+	Cw5 Cw6	A1 B8 DR4+	A10 A28 B8 DR4+	A3 A19 A24 B12+ DR4+				
		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	Equivocal	Negative	Negative	Negative					12-Dec	13-Dec		
11	YES YES	Positive	Positive	Positive	Positive	Positive	Positive	Positive	Positive	12-Dec	13-Dec		
14	YES YES	Positive	Negative	Negative	Negative	Positive	Positive	Positive	Positive	11-Dec	12-Dec		
15	YES YES	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Positive	13-Dec	13-Dec		
19	YES YES	NT	NT	NT	NT	NT	NT	NT	NT	12-Dec	NT	Technical error	
20	YES YES	Positive	Negative	Positive	Negative	Positive	Positive	Positive	Positive	12-Dec	13-Dec		
23	YES YES	Positive	Negative	Negative	Negative	Positive	Positive	Positive	Positive	12-Dec	12-Dec		
24	YES YES	NT	NT	NT	NT	NT	NT	NT	NT	13-Dec	14-Dec	Delay of sample receipt amd samples partially frozen on receipt	
25	YES YES	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Positive	12-Dec	12-Dec		
28	YES YES	Equivocal	Negative	Negative	Negative	Positive	Positive	Positive	Positive	12-Dec	12-Dec	Serum 2 contained small clots	
34	YES YES	Positive	Negative	Negative	Negative	Positive	Positive	Positive	Positive	12-Dec	12-Dec		
35	YES	NT	NT	NT	NT					13-Dec	13-Dec	Late delivery	
38	YES YES	Positive	Positive	Negative	Positive	Positive	Positive	Positive	Positive	12-Dec	12-Dec		
39	YES YES	Positive	Negative	Negative	Negative	Positive	Positive	Positive	Positive	12-Dec	12-Dec		
41	YES YES	Positive	NT	Negative	Negative	Positive	NT	Positive	Positive	12-Dec	12-Dec	Serum 2 sample failed. Insufficient cells to repeat	
42	YES YES	Positive	Negative	Negative	Negative	Positive	Positive	Positive	Positive	12-Dec	12-Dec		
45	YES YES	Positive	Negative	Negative	Negative	Positive	Positive	Positive	Positive	12-Dec	12-Dec		
48	YES YES	Negative	Negative	Negative	Negative	Positive	Positive	Positive	Positive	12-Dec	12-Dec		
51	YES YES	Negative	Negative	Positive	Equivocal	NT	NT	NT	NT	12-Dec	13-Dec	Insufficient cells to test B cells	
54	YES YES	Positive	Negative	Negative	Negative	Positive	Positive	Positive	Positive	12-Dec	13-Dec		
58	YES YES	Positive	Negative	Negative	Negative	Positive	Positive	Negative	Positive	12-Dec	12-Dec		
62	YES YES	Positive	Negative	Negative	Negative	NT	NT	NT	NT	12-Dec	12-Dec	Low lymphocyte yield	

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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	-	0.4	0.4	0.4	0.4	5.6			>1.5 x trimmed mean	Median x (log)	90
11	415, 386	192, 199	197, 194	200, 201	140, 143, 140, 150	685, 4538			1.2 RMF of negatives	Median Log Channel	
14	1807	955	857	907	756	24852			1.5 x Mean Negative	Median Fluorescence	
15	703	405	308.5	273	249	15799.5			RMF >1.5	Median	
19	NT	NT	NT	NT	NT	NT			NT	NT	NT
20	1.474	0.346	0.541	0.51	0.361	1.939			40 Linear Channel Shift	Median Channel Fluorescence	90
23	6.49	4.1	3.7	5	3.2	54.7			3SD	Median Channel Fluorescence	
24	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
25	2.6	1.3	1.2	1.2	132	6988			RMF >1.2	Median Log Channel	
28	108	61	57	69	47	810			Pos:Neg >= 3.1 Pos 1.6-3.0 Equivocal	MFI	95
34	19.87	15.17	12.33	14.37	12.6	150			+2SD 15.9	Median FL1	
35	3.23	1.18	1.31	1.45	2.29	100.1			Mean +3SD	Median Log Channel	10
38	88.7	67.2	9.6	37.5	0	499.6			33 Linear Channel Shift	Linear Channel Shift	95
39	0.41	0.19	0.19	0.18	0.16	5.35			>1.5 RMF	Median Log Reference	
41	316	NT	175	172	139	5877			RMF >1.6	Median	95
42	1.43	1.06	1.01	1.14	1	92.42			RMF >1.3	RMF	
45	272	226	204	207	192	575			40 Channel Shift	Median Channel Value	
48	1.21	0.74	0.77	0.74	0.68	39.3			>2.3	Median	
51	0.7	-0.2	3.3	2.2	-0.14	73.6			2.36		90
54	421, 418	334, 305	305, 313	306, 303	302, 301, 290	919			Test MESF > or = 1.2 x mean AB MESF	Median Channel Shifts	
58	318	189	174	164	130	1067			1.5 x Mean	Median Fluorescence	95
62	2.23	0.95	0.81	0.81	0.67	40.46			RMF >1.5	Median Fluorescence Intensity	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	8199, 5279	6624, 6982	2107, 1930	13849, 13180	466, 464, 470, 513	4296, 14054			1.5 RMF of Negatives	Median Log Channel	
14	9519	9727	5450	19625	3024	46533			1.5 x Mean Negative	Median Fluorescence	
15	4911.5	6287	2531	9900.5	782.5	19020			RMF >1.5	Median	
19	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
20	17.005	5.673	6.846	28.331	1.381	6.168			40 Linear Channel Shift	Median Channel Fluorescence	90
23	36.2	33.79	16.87	137	8.61	122.2			2SD	Median Channel Fluorescence	
24	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
25	5.9	8.7	3.3	13.2	507	11694			RMF >1.3	Median Log Channel	
28	404	429	213	835	57	972			Pos:Neg >/= 3.6 2.0-3.5 Equivocal	MFI	95
34	16.4	15.93	7.43	15.93	4.6	40			+2 SD 6.04	Median FL1	
38	121.6	138.6	62.2	221.2	0	287.1			40 Linear Channel Shift	Linear Channel Shift	95
39	5.1	4.59	2.53	7.78	0.94	10.12			>2.0 RMF	Median Log Reference	
41	1632		1226	4452	581	5492			RMF >1.6	Median	95
42	7.55	9.26	2.46	31.54	1	238.56			RMF >1.5	RMF	
45	530	565	498	662	418	707			40 Channel Shift		
48	8.04	9.45	3.42	26.62	1.04	43			>2.3	Median	
51	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
54	548	572	448	660	396, 335, 368	822			Test MESF >/= 1.2 x Mean AB MESF	Median Channel Shift	
58	4317	7234	1371	7788	905	7030			1.5 x Mean	Median Fluorescence	95
62	34.42	44.71	10.27	45.41	2.12	106			RMF >3	Median Fluorescence	90