

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

T-CELL AND B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B10/2018 OS WB (COMPARED TO LOCAL NEGATIVE CONTROL)

DISPATCHED ON 11TH DECEMBER 2018

HLA PHENOTYPE OF BLOOD DONOR: HLA-A2, A3; B13, B35; Cw4, Cw6; DR7, DR14; DQ2, DQ5

		Summary of Results										
		T-cells				B-cells						
Total tested		16	16	16	16	15	14	15	15			
Positive		14	12	1	0	14	9	14	0			
Negative		2	3	14	16	1	4	1	15			
Equivocal		0	1	1	0	0	1	0	0			
NT		5	5	5	5	5	6	5	5			
% Positive		87.5%	75.0%	6.3%	0.0%	93.3%	64.3%	93.3%	0.0%			
% Negative		12.5%	18.8%	87.5%	100.0%	6.7%	28.6%	6.7%	100.0%			
% Equivocal		0.0%	6.3%	6.3%	0.0%	0.0%	7.1%	0.0%	0.0%			
Consensus		Positive	Positive	Negative	Negative	Positive	Not Assessed	Positive	Negative			
HLA Antibody Specificity (Defined By CDC)		A3 A19 A24 B12+ DR4+	Cw5 Cw6	A1 B8 DR4+	A10 A28 B8 DR4	A3 A19 A24 B12+ DR4+	Cw5 Cw6	A1 B8 DR4+	A10 A28 B8 DR4			
		T-cells				B-cells						
Lab No.	Assessment	Serum 1	Serum 2	Serum 3	Serum 4	Serum 1	Serum 2	Serum 3	Serum 4	Date Received	Date Tested	Comments
	T-cells B-cells											
101	YES YES	Positive	Negative	Negative	Negative	Positive	Positive	Positive	Negative	12-Dec	13-Dec	
114	YES YES	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	12-Dec	13-Dec	
119	YES YES	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	12-Dec	12-Dec	Many number of red cells and resistant to lysis red cells.
126	YES YES	NT	NT	NT	NT	NT	NT	NT	NT	12-Dec	14-Dec	Samples not tested due to sample mix-up (human error)
136	YES	Positive	Positive	Negative	Negative					12-Dec	12-Dec	
142	YES YES	Positive	Equivocal	Negative	Negative	Positive	Equivocal	Positive	Negative	12-Dec	13-Dec	
176	YES YES	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	12-Dec	13-Dec	
185	YES YES	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	12-Dec	14-Dec	
186	YES YES	Positive	Positive	Positive	Negative	Positive	Negative	Positive	Negative	12-Dec	12-Dec	High background on B cells.
204	YES YES	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	12-Dec	12-Dec	
206	YES YES	Positive	Positive	Negative	Negative	Positive	NT	Positive	Negative	12-Dec	13-Dec	Negative on B cells while positive on T cells
227	YES YES	NT	NT	NT	NT	NT	NT	NT	NT	12-Dec	NT	Method not routinely used
230	YES YES	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	13-Dec	14-Dec	
245	YES YES	NT	NT	NT	NT	NT	NT	NT	NT	12-Dec	13-Dec	Invalid results because non specific IgG-fixing on this cell
284	YES YES	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	12-Dec	13-Dec	
311	YES YES	NT	NT	NT	NT	NT	NT	NT	NT	12-Dec	NT	
315	YES YES	Positive	Positive	Equivocal	Negative	Positive	Negative	Positive	Negative	12-Dec	18-Dec	
358	YES YES	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	12-Dec		
374	YES YES	Negative	Negative	Negative	Negative	Positive	Negative	Positive	Negative	20-Dec	20-Dec	
380	YES YES	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	14-Dec	17-Dec	
401		NT	NT	NT	NT	NT	NT	NT	NT			Reagent shortage

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T-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B09/2018 (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 (%)
101	0.700	0.29	0.210	0.190	0.22	5.30			2SD	-	-
114	470	352	209	198	189	487			50 linear channel	Median channels	90
119	-	-	-	-	0.167	3.4			Ratio, Pos >1.289 B-line (1.289-1.45)	MnIX	90
126	-	-	-	-	-	-	-	-	-	Median Channel Shift	-
136	41	15	3.2	2.9	3.6	118			NR>200	Geomean channel	99
142	519	218	147	106	131	2661			187	Median log channel	93
176	0.91	0.48	0.06	0.03	0	0.75			0.4	MFI shift	-
185	0.83	0.6	0.38	0.36	0.38	1.69			2SD	Median log channel	-
186	6.9	2.5	1.3	1	0.7	25.8			1.5x local NC	MFI log channel	99
204	4.32	1.34	0.33	0.321	0.327	21.2			0.491 = 1.5 x loc neg control	Mean log channel	-
206	10.81	1.73	0.56	0.64	0.49	1.44			Ratio MFI serum / MFI NC >1.6	MFI	90
227	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
230	14.2	11.55	9.65	8.43	12.63	245.82			30 MFI	MFI	85
245	NT	NT	NT	NT	7	85.5			7	Linear channel shift	100
284	681	537	333	336	320	391			sample serum/NC ratio > 1,2	Median log channel	-
311	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
315	12	3.7	1.3	0.9	1	7.83			2SD	Geometric mean / ratio	-
358	-	-	-	-	-	-	-	-	-	-	-
374	0	0	0	0	0	100			2000%	FC500 BC	-
380	571	370	310	296	315	462			>40 MCS Linear	MCV linear	80
401											

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

DISPATCHED ON 11TH DECEMBER 2018

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 (%)
101	11.6	2.57	5.23	1.15	0.65	42.8			1.5 SD	-	-
114	640	504	609	374	368	673			60 linear channel	Median channels	90
119	-	-	-	-	1.41	13.8			Ratio, Pos >1.7	MnIX	90
									B-line (1.5-1.7)		
126	-	-	-	-	-	-	-	-	-	Median Channel Shift	-
142	5197	925	2960	264	502	9071			762	Median log channel	93
176	0.73	0.32	0.55	-0.07	0	0.25			0.22	MFI shift	-
185	1.95	0.77	0.92	0.26	0.36	2.81			2SD	Median log channel	-
186	15	4.2	14	2.3	2	42			2x local NC	MFI log channel	99
204	20.1	6.24	6.53	0.494	0.422	35.7			0.843 = 2x loc neg control	Mean log channel	-
206	57.86	5.82	21.07	6.75	6.1	10.98			Ratio MFI serum / MFI NC >1.8	MFI	90
227	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
230	13.82	6.32	11.29	3.22	7.04	777.37			30 MFI	MFI	85
245	NT	NT	NT	NT	26	140.5			15	Linear channel shift	100
284	1572	665	971	397	456	608			sample serum/NC ratio > 1,2	Median log channel	-
311	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
315	6.5	1.6	4.8	0.5	1	6.35			2SD	Geometric mean / ratio	-
358	-	-	-	-	-	-	-	-	-	-	-
374	0	0	0	0	0	100			20	FC500 BC	-
380	726	591	641	395	381	615			>40 MCS Linear	MCV linear	80
401											