

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

T-CELL AND B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B05/2018 OS WB (COMPARED TO LOCAL NEGATIVE CONTROL)

DISPATCHED ON 10 JULY 2018

HLA PHENOTYPE OF BLOOD DONOR: HLA-A1, A25; B18, B44; Cw7, Cw12; DR15, DR-; DQ6, DQ-

		Summary of Results										
		T-cells				B-cells						
Total tested		16	16	16	16	15	15	15	15			
Positive		1	1	16	1	12	0	15	0			
Negative		15	14	0	15	3	14	0	15			
Equivocal		0	1	0	0	0	1	0	0			
NT		2	2	2	2	2	2	2	2			
% Positive		6.3%	6.3%	100.0%	6.3%	80.0%	0.0%	100.0%	0.0%			
% Negative		93.8%	87.5%	0.0%	93.8%	20.0%	93.3%	0.0%	100.0%			
% Equivocal		0.0%	6.3%	0.0%	0.0%	0.0%	6.7%	0.0%	0.0%			
Consensus		Negative	Negative	Positive	Negative	Positive	Negative	Positive	Negative			
Antibody Specificity (Defined By CDC)		Cw5 Cw6	A1	Multi	Negative	Cw5 Cw6	A1	Multi	Negative			
		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
101	YES YES	Negative	Negative	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	12-Jul	
114	YES YES	Negative	Negative	Positive	Negative	Positive	Negative	Positive	Negative	13-Jul	16-Jul	
119	YES YES	Negative	Negative	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	11-Jul	
126	YES YES	Negative	Negative	Positive	Positive	Positive	Negative	Positive	Negative	11-Jul	12-Jul	
136	YES	Negative	Negative	Positive	Negative					12-Jul	13-Jul	NR>200 NR=Relative Number NR= (Mean channel sample/Mean Channel NC)x100
142	YES YES	Negative	Negative	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	12-Jul	
185	YES YES	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	11-Jul	12-Jul	
186	YES YES	Negative	Positive	Positive	Negative	Positive	Negative	Positive	Negative	20-Jul	20-Jul	High background on B cells.
204	YES YES	Negative	Negative	Positive	Negative	Positive	Equivocal	Positive	Negative	11-Jul	11-Jul	
206	YES YES	Negative	Negative	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	12-Jul	
227	YES YES	NT	NT	NT	NT	NT	NT	NT	NT	11-Jul		Not routinely used
230	YES YES	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	12-Jul	13-Jul	
245	YES YES	Negative	Negative	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	12-Jul	
284	YES YES	Negative	Negative	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	11-Jul	
311	YES YES	Negative	Equivocal	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	13-Jul	
315	YES YES											No results returned
358	YES YES	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	11-Jul	11-Jul	
374	YES YES	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	19-Jul	20-Jul	
380	YES YES	NT	NT	NT	NT	NT	NT	NT	NT	18-Jul		Low cell viability

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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	0.148	0.142	0.577	0.153	0.151	4.81			2SD	MFI	
114	188	241	429	182	192	320			50 linear channel	medisn chsnnel	75
119	0.176	0.168	2.67	0.143	0.163	2.14			Ratio:Pos >1.289 B.line (1.289-1.45)	MnIX	97
126	123	183	364	131	124	734			>80 linear	median linear	>90
136	4	5	42	3.5	3.67	218 (NR=5945)			NR>200	geo mean	95
142	208	295	847	210	258	3361			355.8 (258 + 3SD)	median log	87.6
185	0.44	0.49	1.14	0.45	0.44	1.26			2 SD	median log channel	
186	0.41	0.68	5.6	0.38	0.36	56.2			1.5 fold the local negative control	mean fluorescence intensity- log channel	99
204	0.31	0.448	5.46	0.315	0.318	3.77			0.477 = 1.5 x loc neg control	mean log channel	
206	1.74	1.97	19.31	1.15	1.31	4.22			Ratio (MFI serum/ MFI NEG control) >1.6	MFI	90
227	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
230	7.04	6.61	23	7.17	6.38	62.08			20	MFI	100
245	0.5	2.5	19.5	0	0	55			7	linear channel shift	100
284	316	349	685	328	294	2098			sample serum/ negative control ratio >1.2	median log channel	
311	1.41	1.95	16.3	1.1	1	5.3			ratio >2.3	median	90
315											
358	-	-	-	-	-	-	-	-	-	-	-
374	0	0	33	1	0	100			20	FC500	
380	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

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B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B05/2018 (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	1.13	0.503	4.83	0.359	0.344	38.7			2SD	MFI	
114	516	404	653	368	396	624			60 linear channel	median channel	75
119	10.5	3.04	22.8	1.07	1.17	2.45			ratio:pos >1.7 B.line (1.5-1.7)	MnIX	97
126	377	245	553	193	143	724			>120 linear channel shift	median linear channel	>90
142	1355	567	2227	600	1036	10045			1226.5	median log	87.6
185	0.49	0.24	1.75	0.15	0.17	1.39			2SD	median log channel	
186	4.5	1.59	13.6	1.48	1.29	21.8			2 fold from local negative control	mean fluorescence intensity- log channel	99
204	7.82	1.14	16.8	0.342	0.467	60.8			0.933 = 2 x loc neg control	mena log channel	
206	34.52	4.2	85.94	2.52	2.69	6.05			ratio (MFI serum/ MFI NEG control) >1.8	MFI	90
227	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
230	13.7	3.28	60	3.11	6.98	102.74			40	MFI	100
245	19	5	64	2	122.5				15	linear channel shift	100
284	533	394	1343	344	357	6015			sample serum/ neg control ratio >1.2	median log channel	
311	7.44	1.22	11.94	1.07	1	2.7			ratio >1.7	median	90
315											
358	-	-	-	-	-	-	-	-	-	-	-
374	0	0	85	0	0	100			20	FC500	
380	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT