

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

T-CELL AND B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B03/2017 (COMPARED TO LOCAL NEGATIVE CONTROL)

DISPATCHED ON 14TH MARCH 2017

HLA PHENOTYPE OF BLOOD DONOR: HLA-A1, A3; B7, B8; Cw7, -; DR13, DR17; DQ2, DQ6

		Summary of Results											
		T-cells				B-cells							
Total tested		16	18	18	17	15	13	16	15				
Positive		10	2	0	10	4	5	2	14				
Negative		6	16	18	7	11	8	14	1				
NT/Equivocal		7	5	5	6	7	9	6	7				
% Positive		62.5%	11.1%	0.0%	58.8%	26.7%	38.5%	12.5%	93.3%				
% Negative		37.5%	88.9%	100.0%	41.2%	73.3%	61.5%	87.5%	6.7%				
Consensus		Not Assessed	Negative	Negative	Not Assessed	Not Assessed	Not Assessed	Negative	Positive				
HLA Antibody Specificity (Defined By CDC)		A11	A2 A28 A9	DR4 DR9	B44	A11	A2 A28 A9	DR4 DR9	B44				
		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	Viability (%)	Comments
23		NT	NT	NT	NT	NT	NT	NT	NT	15-Mar	15-Mar		Very low cell yield
34		Positive	Negative	Negative	Positive	Equivocal	Negative	Negative	Positive	13-Mar	15-Mar	95	
54		Positive	Negative	Negative	Positive	Negative	Equivocal	Negative	Positive	15-Mar	15-Mar		99
58		Positive	Negative	Negative	Positive	NT	NT	NT	NT	15-Mar	15-Mar		
62		Positive	Negative	Negative	Positive	Negative	Equivocal	Negative	Positive	15-Mar	16-Mar		99
101		Positive	Negative	Negative	Positive	Negative	Negative	Negative	Positive	15-Mar	16-Mar		
114		NT	NT	NT	NT	NT	NT	NT	NT	20-Mar	NT	NT	99
133		Equivocal	Negative	Negative	Equivocal	Negative	Negative	Negative	Positive	17-Mar	17-Mar		
136		Positive	Negative	Negative	Negative					15-Mar	16-Mar	100	94.1
142		Positive	Positive	Negative	Positive	Positive	Negative	Positive	Positive	16-Mar	17-Mar		
163		Positive	Negative	Negative	Positive	Positive	Positive	Negative	Positive	13-Mar	16-Mar	98.7	Not tested , technique still under validation
185		NT	NT	NT	NT	NT	NT	NT	NT	15-Mar			
186		Positive	Negative	Negative	Positive	Negative	Negative	Negative	Negative	15-Mar	15-Mar	99	60
202		Negative	Negative	Negative	Negative	Negative	Negative	Negative	Equivocal	16-Mar	16-Mar		
204		Positive	Negative	Negative	Positive	Positive	Positive	Negative	Positive	15-Mar	15-Mar		90
206		Negative	Positive	Negative	Positive	Negative	Equivocal	Negative	Positive	16-Mar	16-Mar		
227		NT	NT	NT	NT	NT	NT	NT	NT	15-Mar			Technical failure
230		Negative	Negative	Negative	Negative	Negative	Positive	Negative	Positive	20-Mar	20-Mar	57	
245		Negative	Negative	Negative	Negative	Negative	Negative	Negative	Positive	15-Mar	16-Mar	100	88
276		Negative	Negative	Negative	Negative	Positive	Positive	Positive	Positive	16-Mar	20-Mar		
284		Equivocal	Negative	Negative	Negative	Negative	Positive	Negative	Positive	15-Mar	15-Mar		20
302		NT	NT	NT	NT	NT	NT	NT	NT	22-Mar	22-Mar		
358		Negative	Negative	Negative	Negative	Negative	Negative	Negative	Positive	16-Mar	16-Mar		

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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
23	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
34	5.19	3.88	3.67	5.27	3.93	38			5.13	MEDIAN FL1
54	396, 388	256, 270	241, 244	378, 388	257,263,269,270,267	872,737			>1.2 x MESF	MCS
58	243.00	181	174	361	139	825			1.5 x mean 209	log median
62	0.9575	0.44	0.395	0.954	0.4103	5.49			RMF >1.5	median log channel
101	-	-	-	-	-	-	-	-	-	-
114	NT	NT	NT	NT	NT	NT	NT	NT	NT	
133	1	0.4	0.3	1	0.3	39.7			2SD	median fluorescence intensity
136	6.9 (weak positive)	3.1	2.8	6.4	3.3	21 NR=630			NR >200	NR - Relative Number
142	336.00	174	79	176	151	5928			166 (151.67 + 3SD)	Median Log Channel
163	6.6	1.5	1.0	8.8	1	6.3			2.3 (ratio above)	Geomean linear channel (serum/negative control)
185										
186	1.33	0.55	0.34	1.26	0.37	12.8			1.5 fold the local negative control	Mean fluorescence intensity-Log channel
202	0.5%	0.8%	0.4%	1%	1.1%	99.9%			5%	Cell Percentage
204	0.97	0.32	0.32	0.74	0.33	55.5			0.49 = 1.5 x loc neg control	Mean log channel
206	2.81	4.17	2.82	2.97	2.76	11.99			Ratio(MFI-serum/MFI-NC_>1.07	
227	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
230	8.06	9.47	8.51	10.55	6.73	174.99			MFI	
245	3	0	0	3.5	2 mean linear channel				7	Linear channel shift
276	222	66	59	468	60	13933			2SD	Median fluorescence intensity
284	356	324	308	339	346		2372	386	sample serum/negative control ratio > 1.2	Median log channel
302	NT	NT	NT	NT	NT	NT	NT	NT	NT	Beckman Coulter Navios Flow Cytometer
358	-	-	-	-	-	-	-	-	-	MFI

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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
23	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
34	11.1	10.43	10.23	24.87	8.64	65			11.24	MEDIAN FL1
54	606, 605, 605	676, 704, 686	626, 617, 626	753, 767, 754	628,660,602,666,645,630	964, 773			>1.2 × MESF	MCS
58	NT	NT	NT	NT	NT	NT	NT	NT	NT	log median
62	4.5	6.325	3.44	16.35	2.2267	39.55			RMF >3	median log channel
101	-	-	-	-	-	-	-	-	-	-
114	NT	NT	NT	NT						
133	2.8	3.7	1	24.2	4.5	113.5			2SD	median fluorescence intensity
142	750	450	706	1137	540	6942			666(540+3SD)	Median Log Channel
163	2.2	1.9	1.4	6.6	1	4.0			1.7 (ratio above)	Geomean linear channel (serum/negative control)
185										
186	0.58	1.19	0.57	0.53	0.59	14.7			2 fold the local negative control	Mean fluorescence intensity-Log channel
202	0.6%	2.8%	1.5%	7.9%	3%	99.4%			8%	Cell Percentage
204	22.2	3.24	0.95	22.8	0.73	73.4			1.46 = 2x loc neg control	Mean log channel
206	4.01	4.52	4.23	5.04	4.18	36.84			Ratio(MFI-serum/MFI-NC)>1.17	
227	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
230	7.57	28.60	7.07	54	8.13	235.35			MFI	
245	2.5	1.5	0.5	36.5	5 mean linear channel	57			15	Linear channel shift
276	585	441	431	1086	52	10744			2SD	Median fluorescence intensity
284	373	454	330	951	363		4942	452	serum sample/NC ratio >1.2	Median log channel
302	NT	NT	NT	NT	NT	NT	NT	NT	NT	Beckman Coulter Navios Flow Cytometer
358	-	-	-	-	-	-	-	-	-	MFI