

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

T-CELL AND B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B04/2018 OS WB (COMPARED TO LOCAL NEGATIVE CONTROL)

DISPATCHED ON 01 MAY 2018

HLA PHENOTYPE OF BLOOD DONOR: HLA-A2, A68; B18, B51; Cw7, Cw-; DR9, DR13; DQ6, DQ9

		Summary of Results										
		T-cells				B-cells						
Total tested		17	17	17	17	16	16	16	16			
Positive		0	1	0	0	10	1	2	9			
Negative		17	16	17	17	5	15	14	6			
Equivocal		0	0	0	0	1	0	0	1			
NT		2	2	2	2	2	2	2	2			
% Positive		0.0%	5.9%	0.0%	0.0%	62.5%	6.3%	12.5%	56.3%			
% Negative		100.0%	94.1%	100.0%	100.0%	31.3%	93.8%	87.5%	37.5%			
% Equivocal		0.0%	0.0%	0.0%	0.0%	6.3%	0.0%	0.0%	6.3%			
Consensus		Negative	Negative	Negative	Negative	Not Assessed	Negative	Negative	Not Assessed			
HLA Antibody Specificity (Defined By CDC)		DQ2	A11	B7	A1	DQ2	A11	B7	A1			
		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	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	02-May	03-May	-
114	YES YES	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	03-May	03-May	-
126	YES YES	Negative	Negative	Negative	Negative	Positive	Negative	Negative	Positive	02-May	03-May	-
136	YES	Negative	Negative	Negative	Negative					02-May	03-May	NR>200
142	YES YES	Negative	Negative	Negative	Negative	Positive	Negative	Negative	Positive	02-May	04-May	-
185	YES YES	Negative	Negative	Negative	Negative	Positive	Negative	Positive	Positive	02-May	03-May	-
186	YES YES	Negative	Negative	Negative	Negative	Positive	Negative	Negative	Negative	02-May	02-May	-
204	YES YES	Negative	Negative	Negative	Negative	Positive	Negative	Negative	Positive	02-May	02-May	-
206	YES YES	Negative	Negative	Negative	Negative	Positive	Negative	Negative	Positive	02-May	03-May	-
227	YES YES	NT	NT	NT	NT	NT	NT	NT	NT	02-May	02-May	Samples not tested- exams not routinely used
230	YES YES	Negative	Negative	Negative	Negative	Equivocal	Negative	Negative	Positive	03-May	03-May	-
245	YES YES	Negative	Negative	Negative	Negative	Positive	Negative	Negative	Equivocal	02-May	03-May	-
284	YES YES	Negative	Negative	Negative	Negative	Positive	Negative	Negative	Positive	02-May	03-May	-
302	YES YES	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	08-May	10-May	-
311	YES YES	Negative	Negative	Negative	Negative	Positive	Negative	Negative	Positive	02-May	09-May	-
315	YES YES	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	02-May	04-May	-
358	YES YES	Negative	Negative	Negative	Negative	Positive	Negative	Negative	Positive	02-May	02-May	-
374	YES YES	Negative	Positive	Negative	Negative	Negative	Positive	Positive	Negative	10-May	11-May	Samples delivered too close to deadline
380	YES YES	NT	NT	NT	NT	NT	NT	NT	NT	11-May	NT	Poor cell viability. Delivery delay

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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	0.19	0.19	0.18	0.18	0.17	0.47			1.5 x negative control MFI	MFI	-
114	192	198	185	196	190	388			50 Linear Channel Shift	Median Channel	
126	164	160	162	182	185	673			>80 Channels Shift	Median Linear Channel	90
136	2.7	2.7	2.7	2.6	2.8	131 NR = 4679			NR>200	Geo Mean Channel	97
142	200	196	210	203	210	2884			219 (210+3SD)	Median Log Channel	91.8
185	0.54	0.48	0.53	0.54	0.57	0.8			2 SD	Median Log Channel	NT
186	0.4	0.4	0.4	0.4	0.4	11.6			1.5 fold the local negative control	Mean Fluorescence Intensity Log Channel	99
204	0.321	0.218	0.318	0.312	0.324	6.02			0.486 = 1.5 x loc neg control	Mean Log Channel	-
206	0.77	1	0.87	0.76	0.82	4.29			Ratio >1.5	Mean Log Channel	90
227	-	-	-	-	-	-			-	-	-
230	8	9	7	10	8.7	141			20	MFI	
245	0.3	-0.7	-0.2	0.3	2.7 mean linear channel	36.8			7	Linear Channel Shift	100
284	269	275	276	281	258	1842			Sample Serum/negative control ratio >1.2	Median Log Channel	
302	2	1	2	1	2	30			-	Beckman Coulter Navios Flow Cytometer	65
311	0.9	0.8	0.7	0.9	1	4.2			2.3	Ratio des GeoMean	90
315	0.25	0.25	0.18	0.18	0.26	0.68			1.5 x negative control	Geometric Mean	-
358	-	-	-	-	-	-			-	-	-
374	5.7	21.8	8.5	8.9	0	100			20%	FC500	-
380	-	-	-	-	-	-			-	-	20

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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	0.54	0.62	0.40	0.60	0.97	14.00			1.5 x negative control MFI	MFI	-
114	465	374	413	408	390	638			80 linear channel shift	Median Channel	-
126	467	183	185	426	190	796			>120 channel shift	Median Linear Channel	90
136	-	-	-	-	-	-			-	Geo Mean Channel	97
142	640	221	228	495	298	7562			378 (298+3SD)	Median Log Channel	91.8
185	0.71	0.29	0.68	0.75	0.6	1.63			2SD	Median Log Channel	NT
186	2.4	0.8	0.9	1.8	1	26.9			2 fold the local negative control	Mean Fluorescence Intensity Log Channel	99
204	3.3	0.641	1.09	1.97	0.685	24.7			1.37 = 2 x loc neg control	Mean Log Channel	-
206	4.72	1.83	1.48	8.27	1.38	7.5			Ratio >1.8	Mean Log Channel	90
227	-	-	-	-	-	-			-	-	-
230	42	11	16	52	8	211			40	MFI	-
245	17.7	1.2	1.2	12.7	10.3 mean linear channel	78.2			15	Linear Channel Shift	100
284	380	289	310	396	271	5235			Sample serum/ negative control ratio >1.2	Median Log Channel	-
302	1	1	2	1	1	30			-	Beckman Coulter Navios Flow Cytometer	65
311	3	0.8	1	2.1	1	1.8			1.7	Ratio des GeoMean	90
315	0.25	0.18	0.24	0.24	0.23	0.83			1.7 x negative control	Geometric Mean	-
358	-	-	-	-	-	-			-	-	-
374	5.9	20.3	25.3	4.7	0	100			20	FC500	-
380	-	-	-	-	-	-			-	-	20