

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

T-CELL AND B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B03/2018 OS WB (COMPARED TO LOCAL NEGATIVE CONTROL)

DISPATCHED ON 01 MAY 2018

HLA PHENOTYPE OF BLOOD DONOR: HLA-A2, A11; B7, B62; Cw7, Cw10; DR4, DR17; DQ2, DQ8

		Summary of Results							
		T-cells				B-cells			
Total tested		16	16	16	16	15	15	15	15
Positive		0	6	13	5	10	3	12	8
Negative		16	10	2	10	4	12	3	6
Equivocal		0	0	1	1	1	0	0	1
NT		3	3	3	3	3	3	3	3
% Positive		0.0%	37.5%	81.3%	31.3%	66.7%	20.0%	80.0%	53.3%
% Negative		100.0%	62.5%	12.5%	62.5%	26.7%	80.0%	20.0%	40.0%
% Equivocal		0.0%	0.0%	6.3%	6.3%	6.7%	0.0%	0.0%	6.7%
<b>Consensus</b>		<b>Negative</b>	<b>Not Assessed</b>	<b>Positive</b>	<b>Not Assessed</b>	<b>Not Assessed</b>	<b>Negative</b>	<b>Positive</b>	<b>Not Assessed</b>
HLA Antibody Specificity (Defined By CDC)		DQ2	A11	B7	A1	DQ2	A11	B7	A1

Lab No.	Assessment		T-cells				B-cells				Date Received	Date Tested	Comments
	T-cells	B-cells	Serum 1	Serum 2	Serum 3	Serum 4	Serum 1	Serum 2	Serum 3	Serum 4			
101	YES	YES	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Positive	02-May	03-May	
114	YES	YES	Negative	Positive	Positive	Negative	Positive	Negative	Positive	Negative	03-May	03-May	
126	YES	YES	Negative	Positive	Positive	Positive	Positive	Positive	Positive	Positive	02-May	03-May	
136	YES		Negative	Negative	Positive	Negative					02-May	03-May	NR>200
142	YES	YES	Negative	Positive	Positive	Positive	Positive	Negative	Positive	Positive	02-May	04-May	
185	YES	YES	Negative	Negative	Positive	Negative	Positive	Negative	Positive	Positive	02-May	03-May	
186	YES	YES	Negative	Negative	Positive	Positive	Equivocal	Negative	Negative	Negative	02-May	02-May	High background on B cells.
204	YES	YES	Negative	Positive	Positive	Negative	Positive	Positive	Positive	Positive	02-May	02-May	
206	YES	YES	Negative	Positive	Positive	Positive	Positive	Positive	Positive	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	Equivocal	Negative	Positive	Negative	Positive	Negative	03-May	03-May	
245	YES	YES	Negative	Negative	Positive	Equivocal	Positive	Negative	Positive	Equivocal	02-May	03-May	
284	YES	YES	Negative	Negative	Positive	Negative	Positive	Negative	Positive	Positive	02-May	03-May	
302	YES	YES	Negative	Negative	Negative	Negative	Negative	Negative	Positive	Negative	08-May	10-May	
311	YES	YES	NT	NT	NT	NT	NT	NT	NT	NT	02-May	09-May	Results for cell are invalid because positive control failed.
315	YES	YES	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	02-May	04-May	
358	YES	YES	Negative	Negative	Positive	Negative	Positive	Negative	Positive	Positive	02-May	02-May	
374	YES	YES	Negative	Positive	Positive	Negative	Negative	Negative	Positive	Negative	10-May	11-May	
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	0.21	0.19	0.40	0.23	0.23	1.70			1.5x Negative Control MFI	MFI	-
114	294	346	416	326	277	425			50 Linear Channel Shift	Median Channel	-
126	276	425	525	367	248	733			>80 Channels	Median Linear Channel	90
136	6.3	9.1	30	8.8	4.6	136			NR>200	Geo Mean Channel	98
142	1502	1682	2216	1623	1544	13269			1579 (1544 +3SD)	Median Log Channel	96
185	0.64	0.71	1.04	0.69	0.66	2.04			2SD	Median Log Channel	NT
186	0.8	1.1	2.7	1.5	0.9	25.4			1.5 fold the local negative control	Mean Fluorescence Intensity Log Channel	99
204	0.456	1.05	3.45	0.944	0.395	24.1			0.593 = 1.5 x Loc Neg Control	Mean Log Channel	
206	1.17	3.94	14.89	3.86	0.91	6.84			Ratio >1.5	MFI	90
227	NT	NT	NT	NT	NT	NT			NT	NT	NT
230	11	12	37	10	7	135			20	MFI	-
245	0	2	12.5	4.5	4 Mean Linear Channel	80.5			7 Linear Channel Shift	Linear Channel Shift	100
284	348	349	448	353	333	1638			Sample Serum/ Neg Control Ratio >1.2	Median Log Channel	-
302	2	1	2	1	2	35			-	Beckman Coulter Navios Flow Cytometer	60
311	NT	NT	NT	NT	NT	NT			NT	NT	90
315	0.3	0.3	0.37	0.3	0.3	0.54			1.5 x Neg Control	Geometric Mean	-
358	-	-	-	-	-	-			-	-	-
374	9.4	23.6	21.1	7.7	0	100			20	FC500	-
380	NT	NT	NT	NT	NT	NT			NT	NT	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	0.44	0.65	2.10	0.80	0.50	21.60			1.5x negative control MFI	MFI	-
114	526	454	583	481	416	695			80 Linear Channel Shift	Median Channel	-
126	493	409	594	468	189	805			>120 Channels	Median Linear Channel	90
136	NT	NT	NT	NT	NT	NT			NT	Geo Mean Channel	98
142	3347	2319	5743	2396	2232	44890			2373 (2232+3SD)	Median Log Channel	96
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	5.41	1.63	9.44	3.36	0.725	57.1			1.45=2x Loc Neg Control	Mean Log Channel	
206	10.03	3.6	21.84	7.36	1.94	22.49			Ratio >1.8	MFI	90
227	NT	NT	NT	NT	NT	NT			NT	NT	NT
230	67	18	71	13	14	240			40	MFI	-
245	15	5.5	40	12.5	7 Mean Linear Channel	86.5			15	Linear Channel Shift	100
284	542	324	516	493	310	6068			Sample Serum/Neg Control Ratio >1.2	Median Log Channel	-
302	3	1	2	1	2	38			-	Beckman Coulter Navios Flow Cytometer	60
311	3	0.8	1	2.1	1	1.8			1.7	NT	90
315	0.28	0.2	0.27	0.2	0.21	0.8			1.7 x Negative Control	Geometric Mean	-
358	-	-	-	-	-	-			-	-	-
374	7.3	8.4	21	9.9	0	100			20	FC500	-
380	NT	NT	NT	NT	NT	NT			NT	NT	20