

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

T-CELL AND B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B01/2018 OS WB (COMPARED TO LOCAL NEGATIVE CONTROL)

DISPATCHED ON 27 FEBRUAR

HLA PHENOTYPE OF BLOOD DONOR: HLA-A1, A3; B35, B57; Cw4, Cw6; DR1, DR11: DQ5, DQ7

		Summary of Results										
		T-cells				B-cells						
Total tested		15	15	15	15	14	14	14	14			
Positive		3	0	0	10	4	0	2	10			
Negative		12	15	14	4	10	14	12	4			
Equivocal		0	0	1	1	0	0	0	0			
NT		4	4	4	4	4	4	4	4			
% Positive		20.0%	0.0%	0.0%	66.7%	28.6%	0.0%	14.3%	71.4%			
% Negative		80.0%	100.0%	93.3%	26.7%	71.4%	100.0%	85.7%	28.6%			
% Equivocal		0.0%	0.0%	6.7%	6.7%	0.0%	0.0%	0.0%	0.0%			
Consensus		Negative	Negative	Negative	Not Assessed	Not Assessed	Negative	Negative	Not Assessed			
HLA Antibody Specificity (Defined By CDC)		A1	B12	B7	A1 A11 DR15	A1	B12	B7	A1 A11 DR15			
		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	Comments
101		Negative	Negative	Negative	Positive	Negative	Negative	Negative	Positive	28-Feb	01-Mar	Very low viability on B-cells
114		Negative	Negative	Negative	Positive	Negative	Negative	Negative	Negative	01-Mar	01-Mar	
126		Positive	Negative	Negative	Positive	Positive	Negative	Negative	Positive	28-Feb	01-Mar	B-cell FCMX: Strong background of negative control
136		Negative	Negative	Negative	Equivocal					01-Mar	02-Mar	
142		Positive	Negative	Equivocal	Positive	Negative	Negative	Negative	Positive	01-Mar	02-Mar	High background on B-cells
185		Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	28-Feb	28-Feb	
186		Positive	Negative	Negative	Positive	Negative	Negative	Negative	Negative	28-Feb	28-Feb	
204		Negative	Negative	Negative	Positive	Negative	Negative	Negative	Positive	28-Feb	28-Feb	
206		Negative	Negative	Negative	Positive	Negative	Negative	Negative	Positive	28-Feb	01-Mar	
227		NT	NT	NT	NT	NT	NT	NT	NT	28-Feb		Flow Cytometry Crossmatch not routinely used
230		Negative	Negative	Negative	Negative	Positive	Negative	Positive	Positive	01-Mar	01-Mar	Flow Cytometry Crossmatch not routinely used
245		Negative	Negative	Negative	Positive	Negative	Negative	Negative	Positive	28-Feb	01-Mar	
284		Negative	Negative	Negative	Positive	Negative	Negative	Negative	Positive	28-Feb	28-Feb	
302		Negative	Negative	Negative	Negative	Positive	Negative	Negative	Positive	05-Mar	08-Mar	
311		NT	NT	NT	NT	NT	NT	NT	NT	28-Feb		Flow Cytometry Crossmatch not routinely used
315		NT	NT	NT	NT	NT	NT	NT	NT			No results returned
358		Negative	Negative	Negative	Positive	Positive	Negative	Positive	Positive	28-Feb	28-Feb	
374		Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	07-Mar	08-Mar	
380		NT	NT	NT	NT	NT	NT	NT	NT	13-Mar		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										MFI	
114	280	213	233	345	233	402			283.00	Linear Channel Shift	97
126	362	180	187	368	139	875			>80 MCS	Median Linear Channel	90
136	1.8	1.2	1.4	3.3	1.33	67 NR=5025			NR>200	Geo Mean Channel	98
142	189	134	151	212	120	1827			143 (120 +3 SD)	Median Log Channel	92.7
184	0.758	0.312	0.337	1.2	0.312	15.8			Score>1.2	Median MFI	
185	0.23	0.22	0.22	0.26	0.24	0.96			2 SD	Median Log Channel	NT
186	0.6	0.4	0.4	1.5	0.4	17.2			1.5 Fold the local negative control	MFI - Log Channel	99
204	0.41	0.3	0.31	1.11	0.31	13.2			0.47= 1.5 x Log Neg Control	Mean Log Channel	
206	0.83	0.62	0.73	1.69		1.53			Ratio (MFI Serum/ MFI Neg Ctrl)>1.5	MFI	>90
227	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
230	7.7	7.37	8.2	9.82	8.66	165			20	MFI	
245	1.3	0.3	0.3	6.3	2.7 Mean Linear Channel	48.8			7	Linear Channel Shift	100
284	261	247	265	326	256	1138			Sample Serum / Negative Control Ratio >1.2	Median Log Channel	
302	1.49	1.09	1.1	3.06	3	98				Beckman Coulter Navios Flow Cytometer	60
311	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
315											
358											
374	0	0	0	0	0	100			20%	Cell Percentage	0
380	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

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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											
114	531.00	551.00	526.00	585.00	538.00	800.00			618	Linear Channel Shift	97
126	512.00	290.00	314.00	508.00	268.00	813.00			>120 MCS	Median Linear Channel	90
136	NT	NT	NT	NT	NT	NT			NT		98
142	582.00	555.00	472.00	1248.00	623.00	7263.00			759 (623 + 3 SD)	Median Log Channel	92.7
184	7.35	6.47	5.08	16.40	1.63	102.00			Score >4	Median MFI	
185	1.45	1.24	1.70	1.54	3.43	3.18			2SD	Median Log Channel	NT
186	3.70	2.25	3.00	4.60	3.80	33.80			2 Fold the local negative control	MFI - Log Channel	99
204	3.15	2.07	4.02	6.36	2.53	25.40			5.06 = 2 x Loc Neg Control	Mean Log Channel	
206	2.24	1.44	1.97	9.82	1.86	6.08			Ratio (MFI Serum/MFI Neg Ctrl)>2.0	MFI	>90
227	NT	NT	NT	NT	NT	NT	NT	NT		NT	NT
230	710.00	23.5	562.00	588.00	12.70	267.00			40	MFI	NT
245	8.70	1.20	3.20	26.20	28.3 Mean Linear Channel	149.20			15	Linear Channel Shift	100
284	381.00	439.00	436.00	643.00	451.00	6174.00			Sample Serum / Negative Control Ratio > 1.2	Median Log Channel	
302	7.36	5.01	6.60	20.00	3.00	98.00				Beckman Coulter Navios Flow Cytometer	60
311	NT	NT	NT	NT	NT	NT	NT	NT		NT	NT
315											
358											
374	0	0	0	0	0	100			20	Cell Percentage	0
380	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT