

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

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

DISPATCHED ON 01 MAY 2018

HLA PHENOTYPE OF BLOOD DONOR: HLA-A3, A29; B7, B44; Cw7, Cw-; DR7, DR15; DQ2, DQ6

		Summary of Results										
		T-cells				B-cells						
		41	43	43	42	39	40	40	38			
		37	0	41	10	38	2	36	35			
		3	41	2	31	1	38	2	3			
		1	2	0	1	0	0	2	0			
		5	3	3	4	4	3	3	5			
		90.2%	0.0%	95.3%	23.8%	97.4%	5.0%	90.0%	92.1%			
		7.3%	95.3%	4.7%	73.8%	2.6%	95.0%	5.0%	7.9%			
		2.4%	4.7%	0.0%	2.4%	0.0%	0.0%	5.0%	0.0%			
Consensus		Positive	Negative	Positive	Not Assessed	Positive	Negative	Positive	Positive			
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	Serum 1	Serum 2	Serum 3	Serum 4	Serum 1	Serum 2	Serum 3	Serum 4			
112	YES	YES	NT	NT	NT	NT	NT	NT	NT	07-May	07-May	Poor cell viability. Delivery delay
115	YES	YES	Positive	Negative	Positive	Positive	Negative	Positive	Positive	02-May	03-May	
117	YES	YES	Positive	Negative	Positive	Positive	Negative	Positive	Positive	03-May	03-May	
118	YES	YES	Positive	Negative	Positive	Negative	Negative	Positive	Positive	02-May	02-May	Low number of cells. Cell were clumped
119	YES	YES	Positive	Negative	Positive	Negative	Negative	Positive	Positive	02-May	02-May	Some debris and aggregates.
120	YES	YES	Positive	Negative	Positive	Negative	Negative	Positive	Positive	02-May	03-May	
122	YES	YES	Positive	Negative	Positive	Negative	Negative	Positive	Positive	02-May	03-May	Low number of cells. Cell were clumped
130	YES	YES	Positive	Negative	Positive	Negative	Negative	Positive	Positive	03-May	04-May	
133	YES	YES	Positive	Equivocal	Positive	Equivocal	Negative	Positive	Positive	03-May	04-May	In our daily routine we prefer to repeat tests that fall on the borderline.
138	YES	YES	Positive	Negative	Positive	Negative	Negative	Positive	Positive	02-May	02-May	
139	YES	YES	Positive	Negative	Positive	Negative	Negative	Positive	Positive	03-May	04-May	
143	YES	YES	Negative	Negative	Positive	Negative	Negative	Positive	Positive	03-May	03-May	
144	YES	YES	Positive	Negative	Positive	Negative	Negative	Positive	Positive	03-May	03-May	
145	YES	YES	Positive	Negative	Positive	Negative	Negative	Positive	Positive	02-May	03-May	
147	YES	YES	Positive	Negative	Positive	Negative	Negative	Positive	Positive	02-May	03-May	Low cell viability
149	YES	YES	Positive	Negative	Positive	Negative	Negative	Positive	Positive	02-May	03-May	
154	YES	YES	Positive	Negative	Positive	Positive	Negative	Positive	Positive	02-May	02-May	
157	YES	YES	Positive	Negative	Positive	Negative	Negative	Positive	Positive	02-May	02-May	
159	YES	YES	Positive	Negative	Positive	Negative	Negative	Positive	Positive	02-May	03-May	
160	YES	YES	Positive	Negative	Positive	Positive	Negative	Positive	Positive	02-May	03-May	
163	YES	YES	Positive	Negative	Positive	Positive	Negative	Positive	Positive	02-May	03-May	
167	YES	YES	Positive	Negative	Positive	Positive	Negative	Positive	Positive	02-May	03-May	
169	YES	YES	Positive	Negative	Negative	Negative	Negative	Negative	Positive	02-May	03-May	
176	YES	YES	Positive	Negative	Positive	Negative	Negative	Positive	Positive	02-May	03-May	We received samples with aggregated cells.
189	YES	YES	Negative	Negative	Negative	Negative	Negative	Negative	Negative	02-May	03-May	
190	YES	YES	Positive	Negative	Positive	Positive	Negative	Positive	Positive	02-May	03-May	
191	YES	YES	Positive	Negative	Positive	Positive	Negative	Positive	Positive	02-May	03-May	
193	YES	YES	Positive	Negative	Positive	Positive	Negative	Positive	Positive	02-May	02-May	
194	YES	YES	Positive	Negative	Positive	Negative	Negative	Equivocal	Positive	02-May	02-May	Low number of cells
195	YES	YES	Positive	Negative	Positive	Negative	Negative	Equivocal	Positive	04-May	04-May	We received samples with aggregated cells.
201	YES	YES	Positive	Negative	Positive	Positive	Negative	Positive	Positive	02-May	03-May	
209	YES	YES	Positive	Equivocal	Positive	Positive	Negative	Positive	Positive	02-May	03-May	
218	YES	YES	Negative	Negative	Positive	Positive	Positive	Positive	Positive	04-May	04-May	
220	YES	YES	NT	NT	NT	NT	NT	NT	NT	04-May	NT	There was a delivery delay (arrival friday, may 4th, 1:30pm) and the viability was too low to perform the tests on monday
235	YES	YES	NT	Negative	Positive	Positive	Negative	Positive	NT	02-May	02-May	Low number of cells
238	YES	YES	Positive	Negative	Positive	Positive	Negative	Positive	Positive	02-May	04-May	
240	YES	YES	Positive	Negative	Positive	Positive	Negative	Positive	Positive	03-May	03-May	
246	YES	YES	Positive	Negative	Positive	Negative	Negative	Positive	Positive	02-May	02-May	
252	YES	YES	NT	Negative	Positive	Negative	NT	Positive	Negative	03-May	03-May	Poor cell viability
260	YES	YES	Positive	Negative	Positive	Negative	Negative	Positive	Positive	03-May	03-May	
262	YES	YES	Equivocal	Negative	Positive	Positive	Negative	Positive	Positive	02-May	04-May	Low number of cells
271	YES	YES	Positive	Negative	Positive	Positive	Negative	Positive	NT	03-May	03-May	Cells were clumped
276	YES	YES	Positive	Negative	Positive	Positive	Negative	Positive	Positive	02-May	04-May	
293	YES	YES	Positive	Negative	Positive	Positive	Negative	Positive	Negative	03-May	03-May	
297	YES	YES	Positive	Negative	Positive	Positive	Negative	Positive	Positive	02-May	03-May	
351	YES	YES	NT	NT	NT	NT	NT	NT	NT			Delivery delay
392	YES	YES								NT	NT	No results received

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T-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B03/2018 OS PC (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 (%)
112	NT	NT	NT	NT	NT	NT			NT	Median Log Channel	20
115	392	228	473	294	189	422			>40	Median Linear Channel Shift	
117	14.97	5.46	20.29	5.96	5.02	148.4			Ratio (RMF) >1.3	Median Log Channel	95
118	402	226	453	238	231	810			297 (231+66)	Median Linear Channel MCI	90
119	0.795	0.2	1.34	0.229	0.162	0.561			Ratio Pos >1.285 (B.line 1.285-1.45)	MnIX	90
120	4.52	1.24	4.45	1.98	51.5	4881			Ratio >1.6	Median	100
122	56	8	133	11.5	8		192	54	3SD	Geo Mean Linear Value	78
130	314	167	367	189	147	276			40	Channels	95
133	1.5	1	2.6	0.9	0.1	233			2SD	MFI	100
138	0.4	0.05	0.3	0.07	0	0.85			0.2		
139	7.2	0.41	8.9	0.74	0.32	72			>1.5 Local Neg Control	MFI	80
143	27	1	49	4	2	329			40 Channel Shift	Mean Channel Shift	90.2
144	2.51	1.39	4.02	1.25	1178	7.97			1.6	Median/Ratio	
145	2.47	1.04	2.99	0.848	1.21	30.7			2SD of the ratio	Median Log Channel	95
147	269	135	313	133	147	625			>40 Linear Channel Shift	Linear Channel	100
149	1.071	0.377	1.16	0.371	0.404	119			2SD	Median Log Channel	86
154	368	63	500	103	47	802			Median>150% of negative control and shape of the cytogram	Median Fluorescence	
157	235	125	268	135	127	4212			155 (2SD)	Mean Logarithmic Channel	97
159	368	188	415.5	206	180	459.5			40	Mean Linear Channel	90
160	86.4	11.2	126.6	14.9	8.6	197			>18.2 (Negative +2SD)	Mean Linear Channel	-
163	28.5	2.2	45.2	8.7	1	9.8			2.3 (Ratio Above)	Geoman Linear Channel (Serum/Negative Control)	92
167	999	179	1488	469	155	17453			2SD	Median Log Channel	97
169	358	257	362	279	304	542			>=50 Channel	Median Channel	97
176	0.65	0.01	0.81	0.12	0	1.3			0.4	MFI Shift	NT
189	0.1	0.11	0.09	0.17	0.07	93.45			>5%	Percentage	87
190	128.33	46.67	196.67	68.67	43	200			Ratio >1.5	Median MFI	92
191	129	1.3	276	77	0	318			>30	MFI	85
193	27.33	5.47	43.58	12.06	3.43	139			Negative Control Mean x2.4	Geometric Mean Linear Channel	-
194	1.6	0.384	2.7	0.458	0.331	34			Ratio >2	Median MFI	-
195	466	295	474	290	279	1293			Test/Negative Control >= 1.3	Median Log Channel	85
201	1.3	0.51	2.96	624	482	43.9			S/NK >= 2.0	X-Mean	97
209	3337 (14.1)	Equivocal	5597 (23.7)	913 (3.9)	236	1183 (5.0)			Ratio >1.6	Geometric Mean Value	85
218	81.3	58.9	105	66	77.6	2487			93.1 (1.2 x lowest negative control)	MFI	NT
220	NT	NT	NT	NT	NT	NT			NT	NT	NT
235	NT	3.52	10.75	3.82	3.13	105.54			Above 2 median log channel from negative control sera indicates a positive result	Median Log Channel	80
238	-	-	-	-	947	30196			MESF Serum/ MESF Negative Control	MESF	0
240	31	15	140	22	14	1020			1.2*NC	MFI	60
246	6.44	1.22	7.76	1.28	NT	7			1.75	Median Log FI	88.2
252	NA	1.4	2.8	0.8	165	1197			Median Ratio +/- 2SD	MCR	65
260	88.23	4.77	98.55	4.89	3.56	99.67			>%25 Shift	% Channel Shift	0
262	2788	1696	3604	1660	1892	13313			2SD	Median Shift	61
271	367	167	456	-	131	338			64	Median Log Channel	93
276	1785	209	2511	262	196	13247			1.25 x Neg Ctrl	Median Fluorescence Intensity	98
293	12.86	3.22	26.8	5.05	3.89	116			10 Channel Shift	Channel Shift	80
297	602	135	897	156	127	345			1.3 x Tneg (Grey Zone 1.5-2)	Median FI	-
351	NT	NT	NT	NT	NT	NT			NT	NT	NT
392	-	-	-	-	-	-			-	-	-

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112	NT	NT	NT	NT	NT	NT			NT	Median Log Channel	20
115	676.00	417.00	595.00	658.00	382.00	671.00			>60	Median Linear Channel Shift	
117	150.96	12.45	69.14	73.41	16.48	415.00			Ratio (RMF) >1.5	Median Log Channel	95
118	228.00	129.00	164.00	166.00	117.00	460.00			142.5 (117+25.5)	Median Linear Channel MCI	90
119	4.29	2.44	3.72	6.73	1.5	39.3			Ratio Pos >1.7 (B.Line 1.7-2.3)	MnIX	90
120	8.89	1.15	2.69	3.82	366.00	9431.50			Ratio >2.0	Median	100
122	494.50	40.50	363.00	261.00	69.00	-	601.00	198.00	3SD	Geo Mean Linear Value	78
130	642.00	260.00	563.00	550.00	260.00	494.00			80-100	Channels	95
133	19.60	2.00	6.60	10.00	0.90	492.40			2SD	MFI	100
138	NT	NT	NT	NT	NT	NT			NT	NT	NT
139	81.00	5.45	33.00	23.90	10.00	118.00			>2 Local Neg Control	MFI	80
143	NT	NT	NT	NT	NT	NT			NT	Mean Channel Shift	90.2
144	6.73	1.25	3.22	3.92	3638.00	5.42			2.6	Median/Ratio	
145	19.40	2.85	8.48	8.79	2.26	39.80			2SD of ratio	Median Log Channel	95
147	545.00	269.00	385.00	411.00	283.00	727.00			>60 Linear Channel Shift	Linear Channel	100
149	12.80	1.00	3.04	4.90	1.70	110.00			2SD	Median Log Channel	86
154	5149.00	230.00	1116.00	2235.00	147.00	2289.00			Median >200% of negative control and shape of the curve	Median Fluorescence	
157	805	126	275	443	145	7781			181 (2SD)	Mean Logarithmic Channel	97
159	632.5	347	512	535.5	361	598.5			100	Mean Linear Channel	90
160	906	90.5	365	296	43.9	436			>94.4 (Negative +2SD)	Mean Linear Channel	-
163	18.4	1.1	6.1	8.3	1	2.3			1.7 (ratio above)	Geoman Linear Channel	92
167	8637	1070	3837	4596	1108	23290			2SD	Median Log Channel	97
169	619	322	463	546	421	653			>=80 Channel	Median Channel	97
176	1.27	-0.04	0.69	1.15	0	1.27			0.22	MFI Shift	NT
189	0.01	0.01	0.01	0.39	0.74	97.78			>8%	Percentage	87
190	988	110.33	696.33	924.33	128.33	1000			Ratio>2.5	Median MFI	92
191	179	16	180	239	0	333			>100	MFI	85
193	361.24	37.39	117.03	179.6	32.89	270			Negative Control Mean x2.3	Geometric Mean Linear Channel	-
194	23	1.82	6.47	9.36	1.775	87			Ratio>4	Median MFI	-
195	1460	328	549	665	341	2713			Test/Negative Control >= 1.6	Median Log Channel	85
201	15.4	2.32	12.5	11.4	2.81	102			S/NK >/= 2.5	X-Mean	97
209	39374 (14.1)	3496 (1.3)	15838 (5.7)	15875 (5.7)	2788	5115 (1.8)			Ratio >1.8	Geometric Mean Value	85
218	857	677	879	1000	386	4633			656.2 (1.5x Lowest Negative)	MFI	NT
220	NT	NT	NT	NT	NT	NT			NT	NT	NT
235	45.5	4.76	25.14	-	5.14	326.34			Above 13 Median Log Channel from negative control sera indicates a positive result.	Median Log Channel	80
238	-	-	-	-	-	-			-	MESF	0
240	2300	1030	1386	1430	927	2500			1.4*NC	MFI	60
246	14.27	0.96	7.86	5.59	-	23.31			2.5	Median Log FI	88.2
252	NA	12.50	9.30	1.20	175.00	2525.00			Median Ratio +/- 2SD	MCR	65
260	98.91	17.29	47.04	57.59	12.64	98.77			>25% Shift	% Channel Shift	0
262	15598.00	2454.00	6654.00	7948.00	2724.00	56279.00			2SD	Median Shift	61
271	613.00	231.00	489.00	-	227.00	594.00			90	Median Log Channel	93
276	17909.00	676.00	6945.00	-	-	-			-	Median Fluorescence Intensity	98
293	75.30	24.30	67.90	38.80	28.50	129.80			20 Channel Shift	Channel Shift	80
297	4221.00	211.00	1187.00	1809.00	256.00	418.00			1.5 x Tneg (Grey Zone 1.5-2)	Median FI	-
351	NT	NT	NT	NT	NT	NT			NT	NT	NT
392	-	-	-	-	-	-			-	-	-