

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

T-CELL AND B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B07/2018 PC (COMPARED TO LOCAL NEGATIVE CONTROL)

DISPATCHED ON 02ND OCTOBER 2018

HLA PHENOTYPE OF BLOOD DONOR: HLA-A1, A24; B7, B8; Cw7, Cw-, DR15, DR17; DQ2, DQ6

		Summary of Results										
		T-cells				B-cells						
Total tested	36	36	37	37	34	33	34	34				
Positive	17	8	3	0	30	3	14	2				
Negative	17	28	34	37	2	30	20	32				
Equivocal	2	0	0	0	2	0	0	0				
NT	9	9	8	8	9	10	9	9				
% Positive	47.2%	22.2%	8.1%	0.0%	88.2%	9.1%	41.2%	5.9%				
% Negative	47.2%	77.8%	91.9%	100.0%	5.9%	90.9%	58.8%	94.1%				
% Equivocal	5.6%	0.0%	0.0%	0.0%	5.9%	0.0%	0.0%	0.0%				
Consensus	Not Assessed	Negative	Negative	Negative	Positive	Negative	Not Assessed	Negative				
HLA Antibody Specificity (Defined By CDC)	Cw5 Cw6	A1	A29 DR7 DQ2	B44	Cw5 Cw6	A1	A29 DR7 DQ2	B44				
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			
112	YES YES	NT	NT	NT	NT	NT	NT	NT	NT	16-Oct	16-Oct	Low cell viability
115	YES YES	Positive	Negative	Negative	Negative	Positive	Negative	Negative	Negative	03-Oct	04-Oct	
117	YES YES	NT	NT	NT	NT	NT	NT	NT	NT	04-Oct	04-Oct	Bad replication of NC of T-cells. Poor B-cells
120	YES YES	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	03-Oct	04-Oct	
122	YES YES	Positive	Negative	Negative	Negative	Positive	Negative	Negative	Negative	03-Oct	04-Oct	Low number of B cells
130	YES YES	Negative	Positive	Negative	Negative	Positive	Positive	Positive	Negative	03-Oct	04-Oct	
133	YES YES	Negative	Negative	Negative	Negative	Positive	Negative	Positive	Negative	04-Oct	05-Oct	
138	YES	Negative	Negative	Negative	Negative					03-Oct	03-Oct	
139	YES YES	Positive	Positive	Negative	Negative	Positive	Negative	Positive	Negative	05-Oct	05-Oct	
143	YES	Negative	Negative	Negative	Negative					04-Oct	04-Oct	Low number of B cells
144	YES YES	Positive	Positive	Negative	Negative	Positive	Negative	Positive	Negative	04-Oct	04-Oct	
145	YES YES	Negative	Negative	Negative	Negative	Positive	Negative	Positive	Negative	03-Oct	04-Oct	
147	YES YES	Positive	Negative	Negative	Negative	Positive	NT	NT	NT	03-Oct	03-Oct	Low number of B cells
149	YES YES	Negative	Negative	Negative	Negative	Positive	Negative	Positive	Negative	03-Oct	04-Oct	
154	YES YES	Positive	Positive	Negative	Negative	Positive	Positive	Negative	Negative	03-Oct	04-Oct	
157	YES YES	Positive	Negative	Negative	Negative	Positive	Negative	Negative	Negative	03-Oct	03-Oct	
159	YES YES	Positive	Positive	Negative	Negative	Positive	Negative	Negative	Negative	05-Oct	05-Oct	Shipment delays. Poor B cell concentration
160	YES YES	Negative	Negative	Negative	Negative	NT	Negative	Positive	Positive	03-Oct	04-Oct	Low number of B cells
163	YES YES	NT	NT	NT	NT	NT	NT	NT	NT	03-Oct	03-Oct	Technical issue
167	YES YES	Positive	Positive	Negative	Negative	Positive	Negative	Negative	Negative	03-Oct	04-Oct	
169	YES YES	Negative	Negative	Negative	Negative	Equivocal	Negative	Negative	Negative			
176	YES YES	Equivocal	Negative	Negative	Negative	Positive	Negative	Positive	Negative	04-Oct	05-Oct	
189	YES YES	Negative	Negative	Negative	Negative	Negative	Negative	Positive	Positive	03-Oct	04-Oct	
190	YES YES	NT	NT	NT	NT	NT	NT	NT	NT	03-Oct	04-Oct	
191	YES YES	Positive	Negative	Negative	Negative	Positive	Negative	Negative	Negative	03-Oct	04-Oct	
193	YES YES	Positive	Negative	Negative	Negative	Positive	Negative	Negative	Negative	03-Oct	03-Oct	Not enough cells for duplicates. Very high noise
194	YES YES	Positive	Negative	Negative	Negative	Positive	Negative	Negative	Negative	03-Oct	04-Oct	
195	YES YES	Negative	Negative	Negative	Negative	Equivocal	Negative	Negative	Negative	05-Oct	05-Oct	Received samples with aggregated cells
201	YES YES	Positive	Negative	Negative	Negative	Positive	Negative	Negative	Negative	04-Oct	05-Oct	Cells were clotted
209	YES YES	NT	NT	NT	NT	NT	NT	NT	NT	03-Oct	04-Oct	Negative control has a high reactivity
218	YES YES	NT	NT	NT	NT	NT	NT	NT	NT	05-Oct	05-Oct	Low viability
220	YES YES	Negative	Positive	Negative	Negative	Positive	Negative	Positive	Negative	03-Oct	04-Oct	
235	YES YES	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	03-Oct	03-Oct	
238	YES YES	Negative	Negative	Negative	Negative	Positive	Negative	Negative	Negative	03-Oct	04-Oct	
240	YES YES	Positive	Positive	Negative	Negative	Positive	Positive	Negative	Negative	04-Oct	04-Oct	
246	YES YES	Equivocal	Negative	Negative	Negative	Positive	Negative	Negative	Negative	04-Oct	04-Oct	
252	YES YES	Positive	Negative	Positive	Negative	Positive	Negative	Positive	Negative	04-Oct	04-Oct	
260	YES YES	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	04-Oct	04-Oct	
262	YES YES	Negative	Negative	Negative	Negative	Positive	Negative	Negative	Negative	03-Oct	03-Oct	
271	YES YES	NT	NT	Negative	Negative	Positive	NT	Positive	Negative	08-Oct	08-Oct	Cells were clotted. Delivery delayed
276	YES YES	Negative	Negative	Negative	Negative	Positive	Negative	Negative	Negative	03-Oct	04-Oct	
293	YES YES	Negative	Negative	Negative	Negative	Positive	Negative	Negative	Negative	04-Oct	04-Oct	
297	YES YES	Negative	Negative	Negative	Negative	Positive	Negative	Negative	Negative	03-Oct	04-Oct	
351	YES YES	NT	NT	NT	NT	NT	NT	NT	NT	06-Oct	06-Oct	Very low cell count
392	YES YES	NT	NT	NT	NT	NT	NT	NT	NT			No results returned

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T-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B07/2018 (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											
115	490	415	324	376	413	505			>40	Median Linear Channel Shift	
117											
120	3.07	1.34	1.64	1.16	83	3120.5			Ratio >1.6	Median	100
122	50.5	25.5	11	10.5	12.5		156	43	3SD	Geo Mean Linear Value	60
130	147	196	143	146	140	338			40	Channels	95
133	0.5	0.6	0.4	0.7	0.1	112.4			2SD	MFI	90
138	0.09	0.13	0.06	0.04	0	0.94			0.2		
139	1.2	1.35	0.65	0.53	0.55	45			>1.5 Local Neg Control	MFI	80
143	723	636	17	4	301	25310			>4000	Median Channel Shift	83.7
144	1.95	1.7	1.35	1.1	1174	4.34			1.6		
145	0.377	0.42	0.291	0.304	0.315	48.1			2SD of the ratio	Median Log Channel	98
147	221	181	167	143	175	598			>40 Linear Channel Shift	Linear Channel	100
149	0.333	0.332	0.351	0.346	0.318	47			2SD	Median Log Channel	89
154	257	186	63	57	64	622			Median >200% of negative control	Median of Fluorescence	
157	236	179	159	149	176	7629			204	Median Log Channel	98
159	280	259	191	176	188	488			40 Linear Channel	Channel	90
160	14.2	14.9	8.3	12.3	7.9	244			>16.9 (Negative +2SD)	Mean Linear Channel	
163											
167	621	379	264	233	235	25944			2SD		95
169	247	266	244	237	260	526			>=50 Channel	Median Channel	97
176	0.33	0.22	-0.01	-0.04	0	0.82			0.4	MFI Shift	
189	1.15	1.51	1.47	1.17	1.31	94.78			>5%	Percentage	90
190											
191	106	-2.8	-22	-32	0	481			>30	MFI	90
193	40.59	24.56	12.71	8.27	15.84	268.91			Ratio >2.4	Geo Mean	
194	1.8	0.9	0.8	0.7	0.7	33			Ratio >2.2	Median MFI	90
195	175	161	156	159	165	271			Test/Negative Control >/= 1.3	Median Log Channel	80
201	1.64	817	622	571	635	31.4			Ratio (S/NC)>/=2	X Mean	95
209											
218											
220	4713	11054	4516.5	2192.5	3306.75	261582			6000	Linear Acquisition	95
235	6.49	4.88	7.3	4.96	4.03	87.38			2 Median Log Channel above negative control	Median Log Channel	85
238	3712	2389	2333	2487	2368	24915			MESF Serum/ MESF Negative Control	MESF	
240	41	41	15	15	15	1202			NC 1.2	MFI	60
246	1.72	1.14	1	0.93		7.17			1.75	MFI	83.2
252	0.8292	0.395	0.8977	0.6671	44.11	567.42			Median Ratio 2SD		70
260	11.84%	13.41%	6.14%	2.42%	8.22%	96.03			>25% Shift	% Shift	
262	1905	1633	1433	1193	1871	34360			2SD	Median Channel Shift	70
271			178	150	190	603			64	Median Log Channel	99
276	485	234	207	152	492	19361			>1.5x Neg Control	Median Fluorescence Intensity	98
293	6.79	6.85	5.09	4.41	5.09	281.3			10 Channel Shift	Channel Shift	80
297	235	204	109	87	207	423			1.8x T Neg (GZ: 1.3-1.8)	Median MFI	
351											
392											

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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											
115	702	518	541	480	569	804			>60	Median Linear Channel Shift	
117											
120	5.72	1.15	2.37	1.52	466.5	8829			Ratio >2	Median	100
122	484.5	153	194.5	112.5	145.5		597	209	3SD	Geo Mean Linear Value	60
130	433	350	365	266	230	541			80-100	Channels	95
133	8.5	1.8	4.5	1.4	0.7	224.2			2SD	MFI	90
139	23	6.53	9.62	4.13	4.6	108			>2 Local Neg Control	MFI	80
144	5.1	1.96	2.67	1.36	2410	5.11			2.6		
145	2.63	0.903	1.71	0.696	0.895	5.81			2SD of the ratio	Median Log Channel	98
147	350				181	660			>60 Linear Channel Shift	Linear Channel	100
149	2.21	0.486	1.92	0.616	1.25	62			2SD	Median Log Channel	89
154	2521	586	436	181	228	4203			Median >250% of negative control	Median of Fluorescence	
157	1050	263	356	225	362	14749			398 (negative +2SD)	Median Log Channel	98
159	563	420	464	371	369	678			100 Linear Channel	Channel	90
160		83.3	177	247	70.9	578			>149 (Negative +2SD)	Mean Linear Channel	
163											
167	5196	2210	3013	1671	2094	39384			2SD		95
169	423	333	365	289	346	696			>=80 Channel	Median Channel	97
176	0.71	0.07	0.23	-0.26	0	0.76			0.22	MFI Shift	
189	4.55	2.05	10.56	9.3	4.64	99.99			>5%	Percentage	90
190											
191	150	-7	-11	-13	0	453			>100	MFI	90
193	421.14	106.74	186.49	70.64	114.46	516.25			Ratio >2.3	Geo Mean	
194	19.8	2.6	6.3	3.2	4.7	222			Ratio >3	Median MFI	90
195	234	120	140	118	146	891			Test/Negative Control >=1.6	Median Log Channel	80
201	10.9	2.63	4.64	2.03	2.48	62.4			Ratio (S/NC) >=2.5	X Mean	95
209											
218											
220	25808	12533	16588.5	4715.5	7420.5	261663			6000	Linear Acquisition	95
235	28,26	6,92	19,28	6,67	4,18	486,97			12 Median Log Channel above negative control	Median Log Channel	85
238	15720	5079	6845	4304	4816	59080			MESF Serum/ MESF Negative Control	MESF	
240	1300	1350	1003	1030	916	2300			NC1.4	MFI	60
246	5.72	0.74	1.74	0.58		22.77			2.5	MFI	83.2
252	11.8633	1.2337	23.0817	1.3321	144.6	2308.24			Median Ratio 2SD		70
260	7.9	5.36	5.02	3.35	7.02	93.24			25% Shift	% Shift	
262	10398	3271	4215	2468	3773	78337			SUP 2SD	Median Channel Shift	70
271	539		445	317	234	754			90	Median Log Channel	99
276	4708	1177	1791	914	2280	29207			>1.5x neg ctrl	Median Fluorescence Intensity	98
293	184.3	11.34	12.19	14.72	13.76	102.27			20 Channel Shift	Channel Shift	
297	866	244	275	101	287	526			2.1xTneg (GZ: 1.6-2.1)	Median MFI	
351											
392											