

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

T-CELL AND B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B07/2017 (COMPARED TO LOCAL NEGATIVE CONTROL)

DISPATCHED ON 04 July 2017

HLA PHENOTYPE OF BLOOD DONOR: HLA-A3, A11; B35, B44; Cw4, Cw5; DR7, DR15; DQ2, DQ6

	Summary of Results								Date Received	Date Tested	Comments
	T-cells				B-cells						
Total tested	55	55	51	55	51	49	47	50			
Positive	54	2	0	54	50	5	35	50			
Negative	1	53	51	1	1	44	12	0			
NT/Equivocal	7	7	11	7	11	13	15	12			
% Positive	98.2%	3.6%	0.0%	98.2%	98.0%	10.2%	74.5%	100.0%			
% Negative	1.8%	96.4%	100.0%	1.8%	2.0%	89.8%	25.5%	0.0%			
Consensus	Positive	Negative	Negative	Positive	Positive	Negative	Not Assessed	Positive			
HLA Antibody Specificity (Defined By CDC)	A2	B7	DR4 DR9	B44	A2	B7	DR4 DR9	B44			
Lab No.	Serum 1	Serum 2	Serum 3	Serum 4	Serum 1	Serum 2	Serum 3	Serum 4			
101	Positive	Negative	Negative	Positive	Positive	Negative	Negative	Positive	05-Jul	06-Jul	
112	Positive	Negative	Negative	Positive	Positive	Negative	Equivocal	Positive	06-Jul	07-Jul	
114	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	06-Jul	06-Jul	
115	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	05-Jul	06-Jul	
117	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	07-Jul	07-Jul	
118	Positive	Negative	Negative	Positive	NT	NT	NT	NT	05-Jul	05-Jul	
119	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	05-Jul	06-Jul	
120	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	06-Jul	06-Jul	
122	Positive	Positive	Negative	Positive	Positive	Positive	Positive	Positive	05-Jun	06-Jun	
126	NT	NT	NT	NT	NT	NT	NT	NT	05-Jul		Technical error
130	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	06-Jul	06-Jul	
133	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	06-Jul	07-Jul	
136	Positive	Negative	Negative	Positive	NT	NT	NT	NT	05-Jul	06-Jul	NR - relative number, NR = (mean channel sample/mean channel negative control) x 100
138	Positive	Negative	Negative	Positive	NT	NT	NT	NT	05-Jul	05-Jul	
139	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	06-Jul	07-Jul	
142	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	05-Jul	06-Jul	
143	Positive	Negative	Negative	Positive	NT	NT	NT	NT	06-Jul	06-Jul	
144	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	05-Jul	06-Jul	
145	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	05-Jul	11-Jul	
147	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	06-Jul	06-Jul	
149	Positive	Negative	Negative	Positive	Positive	Negative	Negative	Positive	05-Jul	06-Jul	
154	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	06-Jul	07-Jul	
157	Negative	Negative	Equivocal	Positive	Positive	Negative	Equivocal	Positive	05-Jun	06-Jul	
159	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	06-Jul	06-Jul	
160	Positive	Negative	Negative	Positive	Positive	Equivocal	Positive	Positive	05-Jul	06-Jul	
163	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	05-Jul	06-Jul	
167	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	05-Jul	06-Jul	
169	Positive	Negative	Negative	Positive	Positive	Negative	Negative	Positive	06-Jul	06-Jul	
176	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	05-Jul	06-Jul	
185	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	05-Jul	06-Jul	Test in validation
186	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	05-Jul	05-Jul	
190	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	06-Jul	07-Jul	
191	Positive	Negative	Negative	Positive	Positive	Negative	Negative	Positive	05-Jul	06-Jul	
193	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	05-Jul	05-Jul	
194	Positive	Negative	Negative	Positive	Positive	Equivocal	Equivocal	Positive	06-Jul	06-Jul	
195	Positive	Negative	Equivocal	Positive	Positive	Negative	Positive	Positive	07-Jul	07-Jul	
201	NT	NT	NT	NT	NT	NT	NT	NT	07-Jul	07-Jul	Low cell count, samples delivered late
202	Positive	Negative	Negative	Positive	Negative	Negative	Negative	Equivocal	05-Jul	05-Jul	
204	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	06-Jul	06-Jul	
206	Positive	Negative	Equivocal	Positive	Positive	Positive	Positive	Positive	05-Jul	05-Jul	
209	Positive	Positive	Negative	Negative	Positive	Positive	Negative	Positive	05-Jul	06-Jul	
218	NT	NT	NT	NT	NT	NT	NT	NT	14-Jul		
220	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	05-Jul	06-Jul	
227	NT	NT	NT	NT	NT	NT	NT	NT	06-Jul		
230	Positive	Negative	Negative	Positive	Positive	Negative	Negative	Positive	07-Jul	07-Jul	
235	Positive	Negative	Negative	Positive	Positive	Negative	Negative	Positive	05-Jul	05-Jul	
238	Positive	Negative	Negative	Positive	Positive	Negative	Equivocal	Positive	06-Jul	07-Jul	
240	NT	NT	NT	NT	NT	NT	NT	NT	06-Jul		
245	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	06-Jul	06-Jul	
246	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	05-Jul	05-Jul	
252	Positive	Negative	Negative	Positive	Positive	Negative	Negative	Positive	06-Jul	06-Jul	
260	Positive	Negative	Negative	Positive	Positive	Negative	Negative	Positive			
262	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	06-Jul	06-Jul	
271	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	11-Jul	11-Jul	
276	Positive	Negative	Negative	Positive	Positive	Negative	Positive	Positive	05-Jul	10-Jul	
284	Positive	Negative	Negative	Positive	Positive	Negative	Negative	Positive	06-Jul	06-Jul	
293	Positive	Negative	Negative	Positive	Positive	Positive	Positive	Positive	06-Jul	06-Jul	
297	Positive	Negative	Equivocal	Positive	Positive	Negative	Positive	Positive	06-Jul	07-Jul	
302	NT	NT	NT	NT	NT	NT	NT	NT	11-Jul	12-Jul	
341	Positive	Negative	Negative	Positive	Positive	Negative	Negative	Positive	05-Jul	06-Jul	
351	NT	NT	NT	NT	NT	NT	NT	NT	08-Jul	08-Jul	
358	Positive	Negative	Negative	Positive	Positive	Positive	Positive	Positive	06-Jul	06-Jul	

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

T-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B07/2017 (COMPARED TO LOCAL NEGATIVE CONTROL)

DISPATCHED ON 04 July 2017

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											
112	1280	361	357	782	357	747			RATIO >1.5	Median Log Channel	95
114	549	214	229	463	228	447			278	Median Channel	
115	552	225	235	497	245	363			>40	Median Linear Channel Shifts	
117	28.06	4.78	4.85	12.36	4.25	101.47			RMF >1.3	Median Log Channel	95
118	366	77	93	271	58	560			124	Median Linear Channel	90
119	6.56	0.169	0.216	3.34	0.164	9.87			Ratio >1.285 positive	MnIX	95
120	16.61	1.04	1.07	7.29	60.5	6711.5			Ratio >1.6	Median	100
122	436.5	25	13	216.5	11		200	46		3SD Geo Mean Linear Value	98
126	NT	NT	NT	NT	N	NT			NT		
130	470	143	160	407	142	257			40	Mean Channel Shift	100
133	12.2	0.1	0.1	4.7	0.1	40.8			2SD	Median Fluorescence Intensity	99
136	90	1.3	1.4	46	1.9	44 NR = 2237			NR >200	Geo Mean Channel	99
138	0.47	0.02	0.01	0.35	0.00				> 0.2	D Value Kolmogorov-Smirnov Statistic	
139	11.7	0.327	0.388	6.41	0.273	58.1			>1.5 local negative control	MFI	90
142	873	204	223	542	242	5787			386.6	Median Log Channel	98.4
143	114	-2	0	88	6	157			Ratio ≥3	Mean Channel Shift	89.2
144	10.08	1.12	1.17	5.69	1007	7.22			1.6	Median/Ratio	
145	3.88	0.381	0.377	2.01	0.413	65.3			2SD of ratio	Median Log Channel	98
147	417	105	123	311	110	543			>40 linear channel shift	Linear Channel	100
149	5.065	0.361	0.397	2.385	0.522	180			2SD	Median Log Channel	80
154	1197	63	70	915	52	2612			median >150 of negative control	Mean Fluorescence	
157	159	123		268	133	572			2SD (cut off 163)	Median Linear Channel	98
159	513	176	191	436	176	474			40 Linear Channel Shift	Mean Fluorescence	95
160	143	6.2	8.2	80	5.1	295			>10.9 (negative + 2SD)	Mean Linear Channel	
163	92.8	1.2	1.6	46.2	1	10.3			2.3	Geomean Linear Channel	100
167	5069	231	239	2517	209	43544			2SD	Median Log Channel	95
169	543	248	256	432	278	552			≥50 channel	Median Channel	97
176	1.34	-0.02	0.02	1	0	1.21			0.4	MFI Shift	
185	6.77	0.42	0.42	3.29	0.43	7.61			2SD	Median Log Channel	NT
186	13.1	0.45	0.48	4.9	0.41	53.7			1.5 fold local negative control	Mean Fluorescence Intensity-Log Channel	99
190	944	55	61	473	52	435			ratio serum/SAB >1.5	MFI Shift	66
191	278	21	15	211	0	501			>30	MFI Shift	90
193	156.06	4.82	6.74	77.55	5.02	147.82			Negative control mean x 2.4	Geometric mean linear channel	
194											
195	602	69	87	337	55	5704			Test/negative control ≥ 1.6	Median Log Channel	95
201										X-Mean	
202	44.2	0.4	0.7	29.2	1	100			5	Cell Percentage	60
204	8.71	0.32	0.32	4.72	0.32	48.5			0.63 = 1.5 x negative control	Mean Log Channel	
206	25.51	0.78	0.96	17.62	0.67	17.62			Median Ratio >1.4	MFI	>90
209	5852 (27.3)	10967 (51.2)	182 (0.85)	229 (1.07)	214	1762 (8.2)			1.5 (ratio)	Geo Mean Log Channel (Ratio)	90
218											
220	78491	2626.5	811	48315	2835	261617			6000 above mean of negative controls	Linear Acquisition, Linear Values	97
227											
230	90	7	9	60	6	203			20	MFI	
235	10.84	1.17	1.11	4.49	1.2	15.26			>2 negative control	Median Log Channel	85
238					1009	7576			MESF serum/MESF negative control	MESF	
240											
245	31	3	3	19	2	20.5			7	Linear Channel Shift	100
246	26.09	1.05	1.18	14.09		6.78			1.75	Median Log FI	93
252	3.16	0.82	1.009	1.62	57.77	441.09			Meadian ration ± 2SD	MCR	70
260	325.16	28.39	58.95	287.33	44.25	1345.56			2 x negative control	MFI	
262	6162	865	1040	3302	818	27594			2SD	Median Channel Log	80
271	473	160	206	475	173	451			64	Median Log Channel	99
276	6156	57.7	55.4	2284	92.9	19524			>1.25 x negative control	Median Fluorescence Intensity	95
284	780	270	248	592	269		1282	352	Ratio sample serum/negative control >1.2	Median Log Channel	
293	51.4	4.33	4.53	31.6	6.14	67.66			10 channel shift	Channel Shift	80
297	2028	50	62	940						Median Fluorescence	
302	NT	NT	NT	NT	NT	NT			NT	NT	30
341	21.75	3.26	3.42	12.54	3.65	25.77			3SD	Geo Mean Linear Values	98
351											
358											

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

B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B07/2017 (COMPARED TO LOCAL NEGATIVE CONTROL)

DISPATCHED ON 04 July 2017

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											
112	2.08	377		1.16	371			2.5			
114	714	471	566	654	447	611		507			
115	650	392	535	601	396	643		>60			
117	105.11	8.43	31.87	44.55	5.48	267		RMF >1.5	Median Log Channel		95
118	247	148	221	230	165	433		190.5			
119	20.7	2.55	6.44	15.2	0.85	52		Ratio >1.7 positive	MnIX		95
120	8.62	1.08	3.31	3.94	299	14355.5		Ratio >2			
122	980	179.5	339.5	636.5	53		616	3SD			
126	NT	NT	NT	NT	NT	NT	158	NT			
130	565	308	435	495	230	453		80-100			
133	23.6	0.5	3.1	10.4	0.7	97.6		2SD			
136											
138											
139	24.5	2.93	12.3	15.1	2.14	243		>2 local negative control	MFI		90
142	2136	520	1583	1219	717	13843		808			
143	NA	NA	NA	NA	NA	NA		NA			
144	9.82	2.32	4.28	6.19	2210	7.42		2.6	Median/Ratio		
145	6.96	0.82	2.01	3.91	1.13	67.7		2SD of ratio	Median Log Channel		98
147	543	245	396	459	250	717		>60 linear channel shift	Linlinear Channel		100
149	13.53	1.04	2.68	7.61	3.22	210		2SD			
154	2859	248	865	2292	136	5771		median >250 of negative control			
157	212	178		311	143	620		2SD (cut off 185)			
159	604	327	441	546	267	617		100 linear channel shift			
160	154	89	132	92	15	521		>37 (Negative + 2SD)	Mean Linear Channel		
163	20.6	1.4	3.9	12.5	1	3.3		1.7	Geomean Linear Channel		100
167	10574	1672	3019	5571	1023	50,059		2SD	Median Log Channel		95
169	680	359	444	593	404	659		≥80 channel			
176	1.19	0.11	0.59	0.96	0	1.17		0.22			
185	8.6	0.67	1.88	4.56	0.55	10.2		2SD	Median Log Channel		NT
186	13.4	2.1	5.8	7.9	1.9	31.8		2 fold local negative control	Mean Fluorescence Intensity Log Channel		99
190	1020	136	717	1020	115	1020		ratio serum/SAB >2.5			
191	293	100	98	258	0	501		>100			
193	313.33	28.42	135.98	152.91	17.85	322.13		Negative control mean x 2.3	Geometric mean linear channel		
194											
195	2350	157	410	1274	131	10439		Test/negative control ≥1.6	Median Log Channel		95
201											
202	4	0.3	1.3	7.4	1.4	100		8			
204	16.8	1.01	4.68	14.9	1.05	88.7		2.09 = 2 x negative control			
206	40.58	3.81	16.47	36.73	1.52	53.37		Median ratio >2.2			
209	14225 (14.5)	24320 (24.9)	1301 (1.3)	5158 (5.3)	978	4027 (4.1)		1.7 (ratio)			
218											
220	79590	3730.5	27912	44185.5	3857	261727		6000 above mean of negative controls			
227											
230	100	5	20	46	4	504		40	MFI		
235	26.25	5.62	13.19	33.68	4.01	865.96		>18 negative serum median log channel			
238						1088		MESF serum/MESF negative control	MESF		
240											
245	52.5	4.5	13	35	4	79		15			
246	18.42	1.22	3.24	11.55		32.62		2.5	Median Log FI		93
252	11.86	1.76	4.91	6.91	31.06	1860.08		Median ratio ± 2SD	MCR		70
260	1025.29	189.1	520.8	937	333.97	5034.91		2 x negative control	MFI		
262	18183	865	4214	7197	1242	83165		2SD			
271	540	212	434	533	195	609		90			
276	8181	508	1839	4586	441	17520		>1.25 x negative control	Median Fluorescence Intensity		95
284	1038	345	408	798	350		6628	453	ratio sample serum/negative control >1.2		
293	375.16	111.4	176.24	248.05	66.08	389.147		20 channe shift			
297	5159	353	1072	2541					Median Fluorescence		
302	NT	NT	NT	NT	NT	NT		NT	NT		30
341	33.73	6.86	12.13	25.68	9.41	81.42		3SD	Geo Mean Linear Values		98
351											
358											