

UK NEQAS FOR H&I SCHEME 2B - CROSSMATCHING BY FLOW CYTOMETRY

T-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B07/2014 (COMPARED TO LOCAL NEGATIVE CONTROL)

DESPATCHED ON 8TH JULY 2014

HLA PHENOTYPE OF BLOOD DONOR: HLA-A11, A68; B7, B18; Cw7, -; DR4, DR11; DQ3, -

Summary of Results

Total tested	44	43	45	44
Positive	1	13	1	35
Negative	43	30	44	9
Not Tested	2	2	2	2
% Positive	2.3%	30.2%	2.2%	79.5%
% Negative	97.7%	69.8%	97.8%	20.5%

Consensus	Negative	Not Assessed	Negative	Positive
HLA Antibody (Defined By CDC)	B57	A3	Cw17	A2, A28

Lab No.	Serum 1	Serum 2	Serum 3	Serum 4	Date Received	Date Tested	Comments
112	Negative	Equivocal	Negative	Positive	11-Jul	14-Jul	
114	Negative	Negative	Negative	Positive	09-Jul	10-Jul	
115	NT	NT	NT	NT	18-Jul	NT	Late arrival of the samples
116	Negative	Positive	Negative	Positive	09-Jul	16-Jul	
117	Negative	Negative	Negative	Positive	10-Jul	10-Jul	
118	Negative	Positive	Negative	Positive	09-Jul	09-Jul	
119	Negative	Negative	Negative	Positive	09-Jul	10-Jul	
120	Negative	Negative	Negative	Positive	10-Jul	11-Jul	
122	Negative	Negative	Negative	Positive	09-Jul	10-Jul	
126	Negative	Negative	Negative	Positive	09-Jul	09-Jul	
130	Negative	Positive	Negative	Positive	09-Jul	10-Jul	
136	Negative	Negative	Negative	Weak Positive	09-Jul	10-Jul	
138	Negative	Negative	Negative	Positive	09-Jul	09-Jul	
142	Negative	Negative	Negative	Positive	09-Jul	10-Jul	
143	Negative	Positive	Negative	Positive	11-Jul	11-Jul	
144	Negative	Negative	Negative	Positive	10-Jul	11-Jul	
145	Negative	Negative	Negative	Positive	09-Jul	11-Jul	
147	Negative	Negative	Negative	Positive	11-Jul	11-Jul	
154	Equivocal	Positive	Negative	Positive	09-Jul	10-Jul	
157	Negative	Positive	Negative	Positive	09-Jul	09-Jul	
159	Negative	Positive	Negative	Positive	10-Jul	10-Jul	
160	Negative	Negative	Negative	Positive	09-Jul	10-Jul	
163	Negative	Positive	Weak Positive	Positive	10-Jul	10-Jul	
164	Negative	Negative	Negative	Positive	09-Jul	10-Jul	
167	Negative	Positive	Negative	Positive	09-Jul	10-Jul	
169	Negative	Negative	Negative	Negative	09-Jul	10-Jul	
176	Negative	Negative	Negative	Positive	11-Jul	14-Jul	
186	Negative	Negative	Negative	Positive	09-Jul	09-Jul	
190	Negative	Negative	Negative	Negative	09-Jul	10-Jul	
191	Negative	Negative	Negative	Negative	10-Jul	10-Jul	
193	Negative	Positive	Negative	Positive	09-Jul	09-Jul	
194	Negative	Equivocal	Negative	Positive	09-Jul	09-Jul	
195	NT	NT	NT	NT	18-Jul	18-Jul	Late arrival of the samples
201	Negative	Negative	Negative	Negative	08-Jul	09-Jul	
202	Negative	Negative	Negative	Negative	09-Jul	09-Jul	
204	Negative	Positive	Negative	Positive	09-Jul	09-Jul	
209	Negative	Negative	Negative	Negative	09-Jul	11-Jul	
218	Positive	Positive	Negative	Positive	09-Jul	10-Jul	
220	Negative	Negative	Negative	Positive	11-Jul	11-Jul	
227	Negative	Negative	Negative	Positive	09-Jul	09-Jul	
235	Negative	Negative	Negative	Negative	10-Jul	10-Jul	
238	Negative	Negative	Negative	Equivocal	09-Jul	10-Jul	
245	Negative	Negative	Negative	Positive	09-Jul	10-Jul	
246	Negative	Negative	Negative	Negative	09-Jul	10-Jul	
252	Negative	Negative	Negative	Negative	11-Jul	11-Jul	
262	Negative	Negative	Negative	Weak Positive	10-Jul	10-Jul	
283	Negative	Positive	Negative	Positive	09-Jul	09-Jul	

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T-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B07/2014 (COMPARED TO LOCAL NEGATIVE CONTROL)

DESPATCHED ON 8TH JULY 2014

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	FCXM NIBSC negative control used?
112	0.494		0.551	2.38	0.409	1.36			>1.5 ratio	Log median channel	No
114	216	244	216	323	198	268			248 (198+50)	Median linear channel	No
115	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
116	0.33	0.47	0.34	1.2	0.21	23			ratio >1.7	Median log channel	No
117	3.64	3.74	3.56	4.74	3.06	63.85			ratio (RMF) >1.3	Median log channel	Yes
118	219	230	215	277	198	657			220 (198+22)	Median linear channel	Yes
119	0.288	0.348	0.283	0.783	0.203	9.37			T-XM: ratio >1.285 B-line -1.48	MnIX	No
120	138.5	164.5	132	223	One AB serum 123.5	One hyperimmunised serum 7698			Neg control median x1.6	Median	No
122	9	11.5	9	19.5	9.5		80	25	3SD	Geomean linear values	Yes
126	327.5	346	324.5	425.00	318.5	583			>55 median linear shift	Median linear channel	No
130	190	226	190	290	170	303			>40		No
136	2.5	3.2	2.8	6.2	2.2	29 NR = 1299			NR >200	Mean channel	No
138	0.1	0.13	0.08	0.23	0	0.97			>0.20	Kolmogorov-Smirnov (D value)	No
142	114	118	101	220	96.33	2580			155.91 3SD	Median log channel	No
143	21	51	6	87	33	803			>40	Mean channel shift	No
144	9.85	12.33	11.3	16.7	8.28	16.9					
	Ratio 1.19	1.49	1.37	2.02	1	2.03			1.77	Ratio	No
145	0.342	0.377	0.345	0.825	0.342	50.3			Med log ch test/Med log ch neg >Mean +2SD	Median log channel	No
147	185	197	182	241	168	355			>60 linear channel shift	Median linear channel	No
154	2.35	3.43	2.12	9.37	1.91	115.77			GMFI >115% control + shape of the curve	GMFI	No
157	147	161	148	193	138	301			153 (Neg+15)	Median linear channel	No
159	184	203	175	265	150	280			40 linear channel shift (>190 MLC)	Mean linear channel	No
160	12.6	18	10.3	25.1	8.7	225			>22.2 (Neg +3SD)	Mean linear channel	No
163	2.2	5.4	2.5	8.7	1	7.2			2.3	Geomean log channel	Yes
164	6.7	9.7	7.4	15.8	4.3	373			Neg control x3		No
167	9	17	7	17	8	936			2SD	Median log channel	No
169	MLC 22.2 NR 67	16.16 48	9.71 29	21.81 65	33.1	575.46 1738			NR = (MFI serum/MFI neg serum) x100 Pos >180 T-cell SI ≥0.50	Mean log channel	No
176	SI 0.15 MESF 3.572	0.25 4.816	0.17 3.84	0.56 13.237	0 2.158						No
186	0.347	0.405	0.344	0.98	0.313	9.61			1.5x the local negative	Mean fluorescence intensity-log channel	No
190	56.83	61.53	54.50	61.20	52.23	95.50			Ratio sample/Neg >1.4	Mean linear channel	No
191	-21	-20	-27	-24	0	113			MFI >5	MFI	No
193	3.84	8.22	3.65	21.57	2.06	296.85			2.5x Neg control	Geomean	No
194	1.85	2.1	1.9	3.7	1.4	52.3			2SD	Median log channel	No
195	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
201	0.361	0.4	0.335	0.636	0.326	19.1			x-mean ≥2.0	X-mean	No
202	1	0.6	1.1	0.9	1.1	84.4			5% above the local neg control	Linear scale	
204	0.38	0.67	0.43	2.45	0.34	4.36			0.51 = 1.5x local neg control	Mean log channel	No
209	1.08	1.24	1.07	1.33	685	1306			>1.63 ratio	Geomean log channel	Yes
218	148	124	83.8	202	81.6	534			68 x1.2 =81.6	Geometric MFI	No
220	5.37	6.04	5.37	9.51	5.06		189.57	24.02	2SD		No
227	0.36	0.39	0.36	0.72	0.36	18.3			0.72 (2x local neg control)	Mean log channel	No
235	8.3	4.58	2.37	2.47	10.4	34.2			±2SD	Median log channel	No
238	471	484	449	673	470	4507			MESF serum/MESF neg control	MESF	No
245	1.2	3.7	1.2	10.7	5.3	17			7 linear channel shift	Linear channel shift	Yes
246	<1%	<1%	1.6%	3.2%	1%	93%			30%		No
252	0.81	0.8	0.73	0.89	64	56			XM median channel/Neg median channel	Median channel ratio	No
262	Ratio Lysis			1.5 32%	1265	30911					
283	-99.32	37.75	18.48	64.01	214.8	345.9 (131.13 channel shift)			Ratio samples/Neg >2-Lysis?12% 20 channel shift	Median log channel Channel shift	No No

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B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B07/2014 (COMPARED TO LOCAL NEGATIVE CONTROL)

DESPATCHED ON 8TH JULY 2014

HLA PHENOTYPE OF BLOOD DONOR: HLA-A11, A68; B7, B18; Cw7, -; DR4, DR11; DQ3, -

Summary of Results

Total tested	41	41	36	40
Positive	2	6	14	29
Negative	39	35	22	11
Not Tested	2	2	2	2
% Positive	4.9%	14.6%	38.9%	72.5%
% Negative	95.1%	85.4%	61.1%	27.5%

Consensus	Negative	Negative	Not Assessed	Not Assessed
HLA Antibody (Defined By CDC)	B57	A3	Cw17	A2, A28

Lab No.	Serum 1	Serum 2	Serum 3	Serum 4	Date Received	Date Tested	Comments
112	Negative	Negative	Positive	Positive	11-Jul	14-Jul	
114	Negative	Negative	Negative	Positive	09-Jul	10-Jul	
115	NT	NT	NT	NT	18-Jul	NT	Late arrival of the samples
116	Negative	Negative	Negative	Negative	09-Jul	10-Jul	
117	Negative	Negative	Positive	Positive	10-Jul	10-Jul	
118	Negative	Negative	Negative	Negative	09-Jul	09-Jul	
119	Negative	Negative	Positive	Positive	09-Jul	10-Jul	
120	Negative	Negative	Negative	Uninterpretable	10-Jul	11-Jul	
122	Negative	Negative	Positive	Positive	09-Jul	10-Jul	
126	Negative	Negative	Positive	Positive	09-Jul	09-Jul	
130	Negative	Positive	Positive	Positive	09-Jul	10-Jul	
142	Negative	Negative	Negative	Negative	09-Jul	10-Jul	
144	Negative	Negative	Negative	Positive	10-Jul	11-Jul	
145	Negative	Negative	Negative	Positive	09-Jul	11-Jul	
147	Negative	Negative	Positive	Positive	11-Jul	11-Jul	
154	Equivocal	Positive	Positive	Positive	09-Jul	10-Jul	
157	Negative	Positive	Negative	Positive	09-Jul	09-Jul	
159	Negative	Positive	Positive	Positive	10-Jul	10-Jul	
160	Negative	Negative	Positive	Positive	09-Jul	10-Jul	
163	Negative	Negative	Weak Positive	Weak Positive	10-Jul	10-Jul	
164	Negative	Negative	Negative	Positive	09-Jul	10-Jul	
167	Negative	Negative	Negative	Negative	09-Jul	10-Jul	
169	Negative	Negative	Negative	Positive	09-Jul	10-Jul	
176	Negative	Negative	Negative	Negative	11-Jul	14-Jul	
186	Negative	Negative	Negative	Negative	09-Jul	09-Jul	
190	Negative	Negative	Equivocal	Positive	09-Jul	10-Jul	
191	Negative	Negative	Negative	Negative	10-Jul	10-Jul	
193	Negative	Equivocal	Positive	Positive	09-Jul	09-Jul	
194	Positive	Positive	Equivocal	Positive	09-Jul	09-Jul	
195	NT	NT	NT	NT	18-Jul	18-Jul	Late arrival of the samples
201	Negative	Negative	Negative	Negative	08-Jul	09-Jul	
202	Negative	Negative	Negative	Negative	09-Jul	09-Jul	
204	Negative	Negative	Negative	Positive	09-Jul	09-Jul	
209	Negative	Negative	Equivocal	Equivocal	09-Jul	11-Jul	
218	Positive	Negative	Negative	Positive	09-Jul	10-Jul	
220	Negative	Negative	Weak Positive	Positive	11-Jul	11-Jul	
227	Negative	Negative	Negative	Positive	09-Jul	09-Jul	
235	Negative	Negative	Negative	Negative	10-Jul	10-Jul	
238	Negative	Negative	Equivocal	Positive	09-Jul	10-Jul	
245	Negative	Negative	Equivocal	Positive	09-Jul	10-Jul	
246	Negative	Negative	Positive	Positive	09-Jul	10-Jul	
252	Negative	Negative	Negative	Negative	11-Jul	11-Jul	
262	Negative	Negative	Equivocal	Positive	10-Jul	10-Jul	
283	Negative	Weak Positive	Negative	Positive	09-Jul	09-Jul	

PLEASE NOTE: THE NEXT DISTRIBUTIONS IS ON 23RD SEPTEMBER 2014

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B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B07/2014 (COMPARED TO LOCAL NEGATIVE CONTROL)

DESPATCHED ON 8TH JULY 2014

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	FCXM NIBSC negative control used?
112	0.613	0.855	2.43	2.43	0.53	4.4			>2.0 ratio	Log median channel	No
114	445	454	477	586	466	536			517 (446+60)	Median linear channel	No
115	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
116	3.59	3.36	4.42	5.66	5.51	43.8			ratio >1.7	Median log channel	No
117	10.75	8.41	24.31	27.51	9.95	178.63			ratio (RMF) >1.5	Median log channel	Yes
118	128	133	142	141	124	445			150 (124+26)	Median linear channel	Yes
119	5.06	4.77	6.66	10.84	3.08	29.1			B-XM: ratio >1.7 B-line 1.5-1.7	MnIX	No
120	625	658	1085		One AB serum 591.50	One hyperimmunised serum 13700			Negative control x2	Median	No
122	47.5	58	86.5	209.5	30		245	76	3SD	Geomean linear values	Yes
126	462.5	469.5	553	588.5	423.5	827			>80 median linear shift	Median linear channel	No
130	311	370	418	504	280	510			>80		No
142	478	446	641	804	604.33	5577			1114.55 3SD	Median log channel	No
144	48.3	51.7	57.5	82.9	36.8	69.4					
	Ratio 1.31	1.41	1.57	2.26	1	1.89			2		No
145	1.35	2.75	2.3	7.3	1.85	120.1			Med log ch test/Med log ch neg >Mean +2SD	Median log channel	No
147	276	283	356	364	245	687			>60 linear channel shift	Median linear channel	No
154	15.37	19.41	23.23	45.74	12.46	209.33			GMFI >130% of neg control + shape of the curve	GMFI	No
157	192	239	209	297	195	544			230 (Neg+35)	Median linear channel	No
159	334	361	408	463	302	626			60 linear channel shift (>362 MLC)	Mean linear channel	No
160	46.9	67.2	108	441	26.3	426			>67.4 (Neg +3SD)	Mean linear channel	No
163	1.2	1.6	1.8	2.2	1	2			1.7	Geomean log channel	Yes
164	21.1	23.4	35.2	59.6	22	1087			Neg control x2.5		No
167	45	52	34	62	52	1760			2SD	Median log channel	No
169	MLC 39.8	70.78	18.44	125.6	41.67	309.71					
	NR 95	169	44	301		743			NR = (MFI serum/MFI neg serum) x100 Pos >200 B-cell SI≥0.30	Mean log channel	No
176	SI 0.01	0.02	0.10	0.18	0.00						
	MESF 20.705	20.87	25.65	32.96	19.91						No
186	1.01	1.07	1.85	2.02	1.99	45.4			Twice the local negative	Mean fluorescence intensity-log channel	No
190	99.1	120.5	182.33	236	73.27	627			Ratio sample/Neg >2.5	Mean linear channel	No
191	-80	-88	-80	-58	0	166			MEFI >10	MFI	No
193	50.07	64.17	118.96	145.26	37.78	73673			2.5x Neg control	Geomean	No
194	55	57	22.6	67.5	12.7	253			2SD	Median log channel	No
195	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
201	2.35	2.49	3.32	3.68	2.49	54			X-mean ≥2.5	X-mean	No
202	0.3	4.8	4.2	4.5	7.4	90.4			8% above the local neg control	Linear scale	
204	6.02	6.08	8.95	16.5	5.06	30.7			10.12 = 2x local neg control	Mean log channel	No
209	1.05	1.22			505	1163			>1.69 ratio	Geomean log channel	Yes
218	7198	4368	3812	9994	5060.9	3985			2977 x1.7= 5060.9	Geometric MFI	No
220	8.22	9.15	10.58	11.32	9.74		391.32	57.91	2SD		No
227	3.91	4.08	4.42	8.76	3.64	53.4			7.28	Mean log channel	No
235	3.72	3.4	5.3	7.55	4.4	49.9			±4SD	Median log channel	No
238	1362	1301	1762	3165	1254	10511			MESF serum/MESF neg control	MESF	No
245	3.5	5.5	16.5	23.5	33	55			20 linear channel shift	Linead channel shift	Yes
246	26.1%	24.4%	82.5%	75.8%	5.7%	95.5%			30%		No
252	0.57	0.66	0.69	0.79	199	214			XM median channel rator/Neg median channel ratio	Median channel ratio	No
262	Ratio			2	2783	71696					
	Lysis			28%					Ratio samples/Neg >2-lysis>12%	Median log channel	No
283	-377.5	138.69	-23.7	428.84	1333.52	493.4			140 channel shift	Channel shift	No