

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

T-CELL AND B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B09/2015 (COMPARED TO LOCAL NEGATIVE CONTROL)

DISPATCHED ON 15TH SEPTEMBER 2015

HLA PHENOTYPE OF BLOOD DONOR: HLA-A1, A23; B8, B44; Cw4, Cw7; DR7, DR17; DQ2, -

	Summary of Results										
	T-cells				B-cells						
Total tested	45	47	43	47	37	39	38	39			
Positive	24	41	4	1	31	34	37	2			
Negative	21	6	39	46	6	5	1	37			
NT/Equivocal	5	3	7	3	10	8	9	8			
% Positive	53.3%	87.2%	9.3%	2.1%	83.8%	87.2%	97.4%	5.1%			
% Negative	46.7%	12.8%	90.7%	97.9%	16.2%	12.8%	2.6%	94.9%			
Consensus	Not Assessed	Positive	Negative	Negative	Positive	Positive	Positive	Negative			
HLA Antibody Specificity (Defined By CDC)	DR3	A3, A11, DR7	DR7, DQ2	DR1	DR3	A3, A11, DR7	DR7, DQ2	DR1			
Lab No.	T-cells				B-cells				Date Received	Date Tested	Comments
	Serum 1	Serum 2	Serum 3	Serum 4	Serum 1	Serum 2	Serum 3	Serum 4			
112	Negative	Positive	Negative	Negative	Positive	Positive	Positive	Negative	21-Sep	21-Sep	Low number of cells
114	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	16-Sep	17-Sep	
115	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	16-Sep	17-Sep	
116	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	16-Sep	17-Sep	
117	NT	NT	NT	NT	NT	NT	NT	NT	17-Sep	17-Sep	
118	Positive	NT	Positive	Positive	Negative	Positive	Positive	Positive	16-Sep	16-Sep	
119	Equivocal	Positive	Negative	Negative	NT	NT	NT	NT	16-Sep	17-Sep	
120	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	17-Sep	18-Sep	
122	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	16-Sep	17-Sep	
126	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	16-Sep	16-Sep	
130	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	16-Sep	17-Sep	
136	Negative	Positive	Negative	Negative					17-Sep	18-Sep	
138	Negative	Positive	Negative	Negative					16-Sep	16-Sep	
139	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	17-Sep	18-Sep	
142	Positive	Positive	Negative	Negative	Positive	Negative	Positive	Negative	16-Sep	17-Sep	
143	Negative	Positive	Negative	Negative					18-Sep	19-Sep	
144	Negative	Positive	Negative	Negative	Equivocal	Positive	Positive	Negative	17-Sep	18-Sep	
145	Negative	Positive	Negative	Negative	Positive	Positive	Positive	Negative	16-Sep	17-Sep	
147	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	15-Sep	17-Sep	
154	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	16-Sep	17-Sep	
157	Negative	Negative	Negative	Negative	Negative	Weak Positive	Positive	Negative	16-Sep	16-Sep	
159	Positive	Positive	Equivocal	Negative	Positive	Positive	Positive	Weak Positive	16-Sep	17-Sep	
160	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	16-Sep	17-Sep	
163	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	17-Sep	17-Sep	
167	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	17-Sep	18-Sep	
169	Negative	Positive	Negative	Negative	Negative	Positive	Positive	Negative	16-Sep	17-Sep	
174	NT	NT	NT	NT	NT	NT	NT	NT	28-Sep		
176	Negative	Positive	Negative	Negative	Negative	Negative	Positive	Negative	16-Sep	17-Sep	
186	Positive	Positive	Negative	Negative	Positive	Positive	Positive	Negative	17-Sep	17-Sep	
190	Negative	Negative	Negative	Negative	Equivocal	Negative	Positive	Negative	17-Sep	18-Sep	
191	Negative	Positive	Negative	Negative	Positive	Positive	Positive	Negative	16-Sep	16-Sep	
193	Positive	Positive	Equivocal	Negative	Positive	Positive	Positive	Negative	16-Sep	16-Sep	
194	Positive	Positive	Equivocal	Negative	Positive	Positive	Positive	Negative	16-Sep	16-Sep	
195	NT	NT	NT	NT	NT	NT	NT	NT			
201	Negative	Positive	Negative	Negative	NT	NT	NT	NT	16-Sep	17-Sep	
202	Negative	Negative	Negative	Negative	Negative	Negative	Positive	Negative	16-Sep	16-Sep	
204	Positive	Positive	Positive	Negative	Positive	Positive	Positive	Negative	16-Sep	16-Sep	
209	Positive	Positive	Equivocal	Negative	Positive	Positive	Positive	Negative	16-Sep	17-Sep	
218	Positive	Positive	Positive	Negative	NT	NT	NT	NT	18-Sep	21-Sep	
220	Negative	Positive	Negative	Negative	Positive	Positive	Positive	Negative	16-Sep	17-Sep	
227	Positive	Positive	Negative	Negative	NT	NT	NT	NT	16-Sep	16-Sep	
235	Negative	Positive	Negative	Negative	Positive	Positive	Positive	Negative	16-Sep	16-Sep	
238	Equivocal	Positive	Negative	Negative	NT	NT	NT	NT	16-Sep	17-Sep	
245	Negative	Weak Positive	Negative	Negative	Positive	Positive	Positive	Negative	17-Sep	18-Sep	
246	Negative	Positive	Negative	Negative	Positive	Positive	Positive	Negative	16-Sep	16-Sep	
252	Negative	Positive	Negative	Negative	Positive	Positive	Positive	Negative	17-Sep	17-Sep	
262	Negative	Negative	Negative	Negative	Positive	Positive	Positive	Negative	16-Sep	16-Sep	
271	Positive	Positive	Negative	Negative	Positive	Positive	NT	Negative	17-Sep	17-Sep	
283	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	16-Sep	16-Sep	
284	Negative	Negative	Negative	Negative	Positive	Positive	Positive	Negative	16-Sep	16-Sep	

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T-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B09/2015 (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	FCXM NIBSC negative control used?	Viability (%)
112	0.44	3.3	0.536	0.327	0.402	1.52			Ratio >1.5	Median log channel	No	99
114	291	348	26	185	194	356			244 (194+50)		No	
115	342	422	251	230	259	382			>40	Median linear channel shifts	Yes	
116	0.41	0.69	0.22	0.18	0.16	42.55			Ratio >1.7	Median log channel	No	
117	NT	NT	NT	NT	NT	NT	NT	NT		NT	NT	NT
118	225	239	184	150	121	890			143 (121+22)	Median linear channel	Yes	90
119	0.487	0.912	0.47	0.159	0.174	2.3			Ratio: Pos >1.289 B-line (1.289-1.45)	MnIX	No	85
120	1.69	2.08	1.25	0.99	79	5613			Ratio >1.6	Median	No	100
122	29	42.5	17.5	10	11		59	19	3SD	Geomean linear values	Yes	95
126	384.5	438.5	292.5	269	272.5	733			>55	Median linear channel	No	90
130	240	286	188	159	150	349			>40		No	
136	2.1	5.1	2.2	1.3	1.3	348			NR>200	Mean channel	No	98
138	0.10	0.33	0.07	0.05	0	0.99			>0.20	D value Kolmogorov-Smirnoff	No	
139	0.754	1.28	0.402	0.247	0.273	3.8			≥1.5 of neg median log channel	Median log channel	No	
142	297	309	219	206	219	6696			252.81 median log channel +3SD	Median log channel	No	87
143	-20	210	22	-13	44	402			≥40 linear channel shift		No	85
144	MFI				1223							
145	Ratio 1.13	2.22	1.30	0.92	1	6.49			1.7		No	
147	0.541	0.096	0.696	0.440	0.472	49.9			(med log ch test/med log ch neg)>mean+2SD	Median log channel	No	90
154	156	227	121	95	102	580			>40 linear channel shift	Median linear channel	No	100
157	137	216	90	71	65	1647			Median > 150% control and shape of the curve	MFI	No	
159	112	111	105	114	101	458			116 (Neg+15)	Median linear channel	No	80
160	224	284	182	154	143	414			183 (40 linear channel shift)	Mean linear channel	No	95
163	31	46	11.5	13.5	13.3	591			>27 (Pos+2SD)	Mean linear channel	No	
167	6.8	12	2.3	1	1	12			2.3	Geomean log channel	Yes	98
169	275	361	189	165	186	84935			2SD		No	98
174	MLC 11.36	31.79	12.39	7.89	9.44	821			Positive NR≥180	Mean log channel	No	94
176	NR 120	337	131	84	84	870			NT	NT	NT	NT
186	SI 0.36	0.52	0.05	-0.06	0	1.59			SI ≥0.5		No	
190	MESF 3135	4363	1647	1252	1455	27812					No	
191	0.795	1.1	0.53	0.42	0.44	42.3			1.5 x the local negative	MFI	No	99
193	59.8	42.8	60.2	28.7	59.13	175			Ratio sample/Neg >1.5		No	80
194	2.24	47	22.5	-11	0	240			MFI >30	MFI	Yes	100
201	8.42	24.17	5.46	2.22	2.06	267.12			Neg control mean x2.5	Geometric mean linear channel	No	
202	1.3	2	0.7	0.4	0.3	34			R >0.7	Median log channel	No	96
204	0.67	1.13	0.4896	0.343	0.35	44.3			Ratio (3/NC) ≥2	X-mean	No	87
209	0.6	0.8	3.1	0.7	1	96.1			5% above the local neg control	Linear scale		
218	0.86	1.56	0.58	0.32	0.33	11.5			0.49 (1.5 x local neg)	Mean log channel	No	
220	2.6	3.7	1	254	932				Ratio >1.6	Geomean log channel	Yes	
227	162	337	274	118	111	921			111 x 1.2 = 133.2	MFI	No	Low
235	85	117	97	77	76.75	302			40 linear channel shift	Median linear channels	No	96
238	2.84	4.1	2.54	1.31	1.07	7.02			2.14 (2x local neg control)	Mean log channel	No	98
245	2.89	25.95	2.91	1.95	1.83	226.71			±2SD	Median log channel	No	80
246	1958	3042	1363	1166	1121	16875			MESF sample/MESF neg control		No	
252	4.3	7	2.3	0	6.7	15.5			7 linear channel shift	Linear channel shift	Yes	100
262	1%	35.4%	8.7%	2%	0.4%	85%			30%		Yes	91
271	1.24	1.64	1.18	0.87	54	294			XM median channel/Neg median channel	Median channel ratio	No	60
283	263	366	179	146	164	483			Ratio sample/Neg >2	Median log channel	No	96
284	0.152	0.4345	0.242	0.0345	54	716			Lysis >12%	Median log channel	No	97
284	58	62	58	53	54	716			>2 channel shift	Median channel shift	No	
284									Sample serum/Neg control: Ratio >1.2	Median log channel	No	

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B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B09/2015 (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	FCXM NIBSC negative control used?	Viability (%)
112	5.08	10.6	45.2	0.448	0.686	12.5			Ratio >1.5	Median log channel	No	99
114	601	584	686	463	446	601			506 (446+60)		No	
115	696	677	778	452	486	776			>60	Median linear channel shifts	Yes	
116	7.45	6.16	15.9	1.44	1.87	54.3			Ratio >1.7	Median log channel	No	
117	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
118	162	176	206	273	138	597			163.5 (138+25.5)	Median linear channel	Yes	90
119	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	65
120	3.78	2.92	8.01	1.13	486.5	14935.5			Ratio >1.6	Median	No	100
122	532	397.5	927	131.5	91		527	149	3SD	Geomean linear values	Yes	95
126	691.5	666	752.5	448	445	909			>55	Median linear channel	No	90
130	524	503	603	360	283	547			>80		No	
139	17.4	14.4	40.2	2.66	1.545	26.7			≥2 of neg median log channel	Median log channel	No	
142	3472	2071	3890	1377	1751	24161			2242.8 median log channel +3SD	Median log channel	No	87
144	MFI NT				5164							
	Ratio NT	3.12	5.53	1.23	1	5.16			2.5		No	
145	3.51	3.3	8.4	1.45	1.8	70			(med log ch test/med log ch neg)>mean+2SD	Median log channel	No	90
147	489	480	581	239	250	693			>40 linear channel shift	Median linear channel	No	100
154	2612	2460	5026	425	324	7161			Median > 150% control and shape of the curve	MFI	No	
157	286	300	387	252	253	531			288 (Neg+15)	Median linear channel	No	80
159	502	506	554	347	241	700			301 (60 linear channel shift)	Mean linear channel	No	95
160	454	447	887	76	37.1	115			>73 (Pos+2SD)	Mean linear channel	No	
163	4.5	4.1	8.1	0.9	1	2.5			1.7	Geomean log channel	Yes	98
167	2772	2357	4023	969	916	19539			2SD		No	98
169	MLC 20.53	35.17	33.45	11.51	13	134.7						
	NR 158	270	257	89		1037			Positive NR≥200	Mean log channel	No	94
174	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
176	SI 0.16	0.14	0.43	-0.16	0	0.63			SI ≥0.3			
	MESF 36841	34041	69339	15900	24138	61299					No	
186	6.25	6.89	11.7	2.75	1.975	68.5			2 x the local negative	MFI	No	99
190	429.3	76.4	628.3	41.3	167.3	791			Ratio sample/Neg >2.5		No	80
191	197	134	290	-1.5	0	360			MFI >100	MFI	Yes	100
193	338.26	265.08	553.50	56.33	42.39	923.92			Neg control mean x2.5	Geometric mean linear channel	No	
194	19	15	33	5	5	50			R >1	Median log channel	No	96
195												
201	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	Low
202	6.7	7.9	23	5	3.8	99.7			8% above the local neg control	Linear scale		
204	17.3	12.4	32.1	2.71	3.61	70.8			7.21 (2 x local neg)	Mean log channel	No	
209	5.8	5.1	11	1.2	1434	3720			Ratio >1.9	Geomean log channel	Yes	
218	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	Low
220	253	264	349	162	206.5	368.5			40 linear channel shift	Median linear channels	No	96
227	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
235	95.17	291.64	443.08	18.10	12.6	3431.8			±4SD	Median log channel	No	80
238	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	Low
245	43.5	35.5	83.5	3	25	48			15 linear channel shift	Linear channel shift	Yes	100
246	63.8%	61%	92.9%	27.6%	28.5%	60.4%			30%		Yes	91
252	3.53	2.69	4.42	1.05	159	691			XM median channel/Neg median channel	Median channel ratio	No	60
262	Ratio 3.47	2.93	6.49		2084	116916			Ratio sample/Neg >2	Median log channel	No	96
	Lysis 23%	13%	70%						>12%			Low
271	559	566		230	256	635			90 channel shift	Median log channel	No	Low
283	-30393	-15223	3347	3042					>10 channel shift	Median channel shift	No	
284	109	92	188	62.5	59	3047			Sample serum/Neg control: Ratio >1.2	Median log channel	No	