

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

T-CELL AND B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B02/2015 (COMPARED TO LOCAL NEGATIVE CONTROL)

DESPATCHED ON 06TH JANUARY 2015

HLA PHENOTYPE OF BLOOD DONOR: HLA-A1,A11; B35,B44; Cw4,Cw5; DR4,-; DQ7,-

Summary of Results											
T-cells					B-cells						
Total tested	46	46	46	46	39	42	41	41			
Positive	2	1	43	1	4	2	35	3			
Negative	44	45	3	45	35	40	6	38			
NT/Equivocal	3	3	3	3	7	4	5	5			
% Positive	4.3%	2.2%	93.5%	2.2%	10.3%	4.8%	85.4%	7.3%			
% Negative	95.7%	97.8%	6.5%	97.8%	89.7%	95.2%	14.6%	92.7%			
Consensus	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative			
HLA Antibody Specificity	B7	DR3	A3,A11,DR7	B12	B7	DR3	A3,A11,DR7	B12			
(Defined By CDC)											
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	Negative	Positive	Negative	Equivocal	Negative	Positive	Negative	09-Jan	09-Jan	B-Cells NT due to low reagents
114	Negative	Negative	Positive	Negative	NT	NT	NT	NT	07-Jan	08-Jan	
115	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	07-Jan	08-Jan	
116	Negative	Negative	Positive	Negative	Negative	Negative	Negative	Positive	07-Jan	08-Jan	
117	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	08-Jan	08-Jan	
118	Negative	Negative	Positive	Negative	Negative	Negative	Negative	Positive	07-Jan	07-Jan	
119	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	06-Jan	07-Jan	
120	Negative	Negative	Positive	Negative	Negative	Negative	Equivocal	Negative	07-Jan	08-Jan	
122	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	07-Jan	08-Jan	
126	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	07-Jan	08-Jan	
130	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	07-Jan	08-Jan	
136	Negative	Negative	Positive	Negative					07-Jan	08-Jan	
138	Negative	Negative	Negative	Negative					07-Jan	08-Jan	
142	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Positive	09-Jan	12-Jan	
143	Negative	Negative	Positive	Negative					09-Jan	09-Jan	
144	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Equivocal	07-Jan	08-Jan	
145	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	09-Jan	09-Jan	
147	Negative	Negative	Positive	Negative	Positive	Negative	Positive	Negative	07-Jan	07-Jan	
154	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	07-Jan	08-Jan	
157	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	07-Jan	07-Jan	
159	Negative	Negative	Positive	Negative	Equivocal	Negative	Positive	Negative	07-Jan	08-Jan	
160	Negative	Negative	Positive	Negative	Negative	Negative	Weak Positive	Negative	11-Jan	12-Jan	
163	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	07-Jan	08-Jan	
167	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	07-Jan	08-Jan	
169	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	08-Jan	09-Jan	
176	Negative	Negative	Positive	Negative	Negative	Negative	Negative	Negative	07-Jan	08-Jan	
186	Negative	Negative	Positive	Negative	Negative	Negative	Weak Positive	Negative	07-Jan	07-Jan	
190	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	07-Jan	08-Jan	
191	Positive	Negative	Negative	Negative	Positive	Positive	Negative	Negative	07-Jan	08-Jan	
193	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	07-Jan	07-Jan	
194	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	07-Jan	09-Jan	
195	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	13-Jan	13-Jan	
201	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	07-Jan	08-Jan	
202	Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	07-Jan	07-Jan	
204	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	07-Jan	07-Jan	
209	NT	NT	NT	NT	NT	NT	NT	NT			No results returned
218	Positive	Negative	Positive	Positive	Positive	Negative	Positive	Positive	08-Jan	09-Jan	
220	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	07-Jan	07-Jan	
227	NT	NT	NT	NT	NT	NT	NT	NT	07-Jan	08-Jan	Technical failure
235	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	08-Jan	08-Jan	
238	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	07-Jan	08-Jan	
245	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	07-Jan	08-Jan	
246	Negative	Negative	Positive	Negative	Positive	Negative	Positive	Negative	07-Jan	08-Jan	
252	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	08-Jan	08-Jan	
262	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	07-Jan	07-Jan	
268	Negative	Positive	Positive	Negative	Negative	Positive	Negative	Negative	07-Jan	08-Jan	
271	Negative	Negative	Positive	Negative	NT	Negative	Negative	Negative	12-Jan	13-Jan	Unable to interpret B-cell result
283	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	07-Jan	07-Jan	
284	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	

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T-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B02/2015 (COMPARED TO LOCAL NEGATIVE CONTROL)

DESPATCHED ON 06TH JANUARY 2015

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	0.234	0.228	1.79	0.263	0.418	1.9			Ratio >1.5	Median log channel	No
114	190	205	351	197	244	337			294 (244+50)	Median linear channel	No
115	186	204.0	414	207	220	383			>40 linear channel shifts	Median linear channel shifts	Yes
116	0.12	0.12	0.28	0.16	0.12	10.85			Ratio >1.7	Median log channel	No
117	3.34	3.32	6.94	3.58	3.62	88.63			Ratio (RMF) >1.3	Median log channel	Yes
118	195	197	308	206	197	796			219 (197+22)	Median linear channel	Yes
119	0.173	0.175	1.65	0.19	0.186	14.6			T-XM ratio >1.285	MnIX	No
									B-line(-1.48)		
120	0.91	0.9	2.31	1.01	98	5146.5			Ratio >1.6	Median	No
122	7.0	7.0	25.0	8.0	8.0		50	18	3SD	Geomean linear values	Yes
126	277.5	275	479.5	289.5	275.5	668			>55 linear channel shifts	Median linear channel shifts	No
130	134	131	264	154	135	267			>40		No
136	3	2.3	20	2.8	2.63	227 (NR=8620)			NR>200	Mean channel	No
138	0.07	0.03	0.15	0.02	0	0.98			>0.20		No
142	158	145	241	151	139	6582			163.56 3SD	Median log channel	No
143	7	18	161	19	50	133			≥40 linear channel shifts	Geomean	No
144	1.09	1.19	2.76	0.96	1.216	6.03			1.7	Ratio	No
145	0.173	0.176	0.546	0.207	0.218	3.74			Med log ch test/Med log ch neg >mean +2SD	Median log channel	No
147	140	138	281	143	133	462			>40 linear channel shifts	Median linear channel	No
154	1.39	1.49	13.15	1.63	1.57	112.66			GMFI >115% control x shampe of the curve	GMFI	No
157	100	97	148	101	99	355			114 (Neg+15)	Median linear channel	No
159	153	145	334	164	154	470			40 linear channel shift	Mean linear channel	No
160	75	7.6	80.1	10.9	8.3	345			>15.7 (Neg+2SD)	Mean linear channel	No
163	1.1	1	12.2	1.8	1	8.4			2.3	Geomean log channel	Yes
167	173	176	867	200	189	27415			2SD	Median log channel	No
169	MLC 11.67	11.61	53.53	20.43	9.48	710.60					
	NR 124	122	564	110		7495			Positive = NR≥180	Mean log channel	No
176	SI 0.07	0.06	1.22	0.14	0	2.05					
	MESF 1119	1086	6377	1244	961	20210			SI≥0.50	MESF	No
186	0.34	0.35	0.86	0.41	0.36	7.7			1.5 fold the negative control	MFI log channel	No
190	35.7	34.9	65.2	37.4	35.6	224			Ratio sample/Neg >1.5		No
191	15	-3	1.4	-2	0	277			MFI >15	MFI	Yes
193	2.88	2.65	56.81	3.73	2.58	301.73			Neg control mean x2.5	Geometric mean linear channel	No
194	0.1%	0.7%	11%	0.8%	0.8%	99%			>2.4%		No
195	235	263	506	287	251	3710			Test/Neg control >1.25	Median log channel	Yes
201	0.293	0.291	0.912	0.296	0.28	30.2			x-mean ratio ≥2	x-mean	No
202	0.5	1.1	1.2	0.3	0.8	83			5% above the local neg control	Linear scale	
204	0.33	0.31	3.15	0.30	0.32	9.11			0.48 = 1.5x local neg control	Mean log channel	No
209											
218	119	83.6	1876	256	73.5	2188			73.5x1.2 =88.2	MFI	No
220	147	154.5	203.75	149.5	137.5		589	386	40 linear channel shift	Median linear channel	No
227	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
235	8.06	4.07	18.28	5.05	5.78	79.86			±2SD	Median log channel	No
238	726	732	2199	809	816	9428			MESF serum/MESF neg control		No
245	0	0.7	10.2	0.7	4.3	13			7 linear channel shift	Linear channel shift	Yes
246	10%	0.1%	86.9%	1.1%	0.1%	96.4%			30%		No
252	1.27	1.1	1.37	1.29	70	187			XM median/Neg median	Median channel ratio	No
262			Ratio 1.93								
			Lysis 50%		1203	14603			Ratio sample/Neg >2 or lysis >12%	Median log channel	No
268											No
271	158	150	381	163	159	377			67 log channel shift	Median log channel	No
283	0.92	0.467	5.012	-0.228	1.988	50.812			3 channel shift	Channel shift	No
284	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT

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B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B02/2015 (COMPARED TO LOCAL NEGATIVE CONTROL)

DESPATCHED ON 06TH JANUARY 2015

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		0.477	2.96	0.592	0.753	3.39			Ratio >2.0	Median log channel	No
114	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
115	402	400	534	361	405	674			>60 linear channel shifts	Median linear channel shifts	Yes
116	1.39	0.9	1.14	2.11	1.12	25.2			Ratio >1.7	Median log channel	No
117	16.42	11.19	29.50	11.66	13.11	276.35			Ratio (RMF) >1.5	Median log channel	Yes
118	191	183	208	191	189	593			215 (189+26)	Median linear channel	Yes
119	4.36	3.28	8.7	3.67	2.89	9.01			B-XM ratio >1.7 B-line(1.5-1.7)	MnIX	No
120	1.47	1.15		1.20	616	10136			Ratio >2.0	Median	No
122	28.5	18.5	72.5	35.5	24.0		222	77	3SD	Geomean linear values	Yes
126	482.0	418.5	616	440.5	435	794			>80 linear channel shifts	Median linear channel shifts	No
130	275	275	432	300	231	462			>80		No
142	1236	1300	1537	1360	1107.33	16860			1344.78 3SD	Median log channel	No
144	1.65	1.74	3.17	7.181	4.65				2.5	Ratio	No
145	0.647	0.536	1.13	0.555	0.653	9.03			0.555 median log channel	Median log channel	No
147	289	225	380	234	212	713			>40 linear channel shifts	Median linear channel	No
154	13.48	15.07	46.31	17.49	15.22	240.41			GMFI >130% control x shampe of the curve	GMFI	No
157	170	153	214	158	168	507			203 (Neg+35)	Median linear channel	No
159	339	248	433	310	276	639			60 linear channel shift	Mean linear channel	No
160	187	104	314	124	184	831			>384 (Neg+2SD)	Mean linear channel	No
163	1	0.9	1.4	0.9	1	1.3			1.7	Geomean log channel	Yes
167	1287	1107	2723	1080	1008	64496			2SD	Median log channel	No
169	MLC 99.91	94.05	282.26	139.50	98.46	1103.7					
176	NR 101	96	287	142	1121				Positive = NR>200	Mean log channel	No
	SI 0	-0.04	0.13	-0.05	0	0.38					
	MESF 18771	16922	26492	16252	18792	48519			SI≥0.30	MESF	No
186	2.31	2.18	3.62	2.27	1.97	46.1			2 fold the local negative	MFI log channel	No
190	133	73.2	187	78.8	88.1	965			Ratio sample/Neg >2.5		No
191	17	17	-12	-18	0	349			MFI >15	MFI	Yes
193	85.65	52.45	216.04	69.11	45.56	835.28			Neg control mean x2.5	Geometric mean linear channel	No
194	2.6%	1.2%	25%	4.5%	9%	100%			>18%		No
195	428	359	1027	489	397	11326			Test/Neg control >1.35	Median log channel	Yes
201	2.683	1.86	4.39	3.3	1.3	89.2			x-mean ratio >2.5	x-mean	No
202	1	5.6	3.2	1.6	3.9	87.2			8% above the local neg control	Linear scale	
204	7.75	6.65	13.3	6.41	7.38	25.9			14.8 = 2x local neg control	Mena log channel	No
209											
218	10774	6836	9541	13832	5174	6283			5174x1.7 =8795.8	MFI	No
220	240.5	218	291.5	232.5	237.75		589	386	40 linear channel shift	Median linear channel	No
227	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
235	35.48	51.86	504.81	49.89	55.48	2713.9			±4SD	Median log channel	No
238	2870	1989	6398	2638	2409	33239			MESF serum/MESF neg control		No
245	4.5	0.5	22	2.5	36	49			20 linear channel shift	Linear channel shift	Yes
246	87.7%	14.7%	86.6%	16.2%	16.1%	93.4%			30%		No
252	1.68	1.1	2.38	1.24	74	207			XM median/Neg median	Median channel ratio	No
262			Ratio 1.5 Lysis 12		4291	22786			Ratio sample/Neg >2 or lysis >12%	Median log channel	No
268											No
271	NT	276	490	275	275	530			106 log channel shift	Median log channel	No
283	-15.3065	-9.194	22.9735	-9.5865	86.484	55.536			20 channel shift	Channel shift	No
284	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT