

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

T-CELL AND B-CELL FLOW CYTOMETRY RESULTS OF SAMPLE 2B08/2015 (COMPARED TO LOCAL NEGATIVE CONTROL)

DISPATCHED ON 07TH JULY 2015

HLA PHENOTYPE OF BLOOD DONOR: HLA-A24, -, B27, B60; Cw2, Cw10 - ; DR4, -, DQ8, -

	Summary of Results								Date Received	Date Tested	Comments
	T-cells				B-cells						
Total tested	43	44	44	45	41	42	40	42			
Positive	1	41	3	2	3	41	19	0			
Negative	42	3	41	43	38	1	21	42			
NT/Equivocal	7	6	6	5	6	5	7	5			
% Positive	2.3%	93.2%	6.8%	4.4%	7.3%	97.6%	47.5%	0.0%			
% Negative	97.7%	6.8%	93.2%	95.6%	92.7%	2.4%	52.5%	100.0%			
Consensus	Negative	Positive	Negative	Negative	Negative	Positive	Not Assessed	Negative			
HLA Antibody Specificity (Defined By CDC)	A3	Cw5, DR4	DR7, DQ2	B12	A3	Cw5, DR4	DR7, DQ2	B12			
Lab No.	Serum 1	Serum 2	Serum 3	Serum 4	Serum 1	Serum 2	Serum 3	Serum 4	Date Received	Date Tested	Comments
112	NT	NT	NT	NT	NT	NT	NT	NT	13-Jul	13-Jul	40% Viability
114	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative	08-Jul	09-Jul	
115	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative	08-Jul	09-Jul	
116	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative	08-Jul	09-Jul	
117	Negative	Positive	Negative	Negative	Negative	Positive	Positive	Negative	09-Jul	09-Jul	
118	Negative	Positive	Positive	Positive	Negative	Positive	Negative	Negative	08-Jul	08-Jul	
119	Negative	Positive	Negative	Negative	Negative	Positive	Positive	Negative	07-Jul	08-Jul	
120	Negative	Positive	Negative	Negative	Negative	Positive	Positive	Negative	09-Jul	10-Jul	
122	Negative	Positive	Negative	Negative	Negative	Positive	Positive	Negative	08-Jul	09-Jul	
126	Negative	Positive	Negative	Negative	Negative	Positive	Positive	Negative	08-Jul	09-Jul	
126	Negative	Positive	Negative	Negative	Positive	Positive	Positive	Negative	08-Jul	09-Jul	
130	Negative	Positive	Negative	Negative	Negative	Positive	Positive	Negative	08-Jul	09-Jul	
136	Negative	Positive	Negative	Negative					08-Jul	09-Jul	
138	Negative	Positive	Negative	Negative					08-Jul	08-Jul	
139	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative	10-Jul	10-Jul	
142	Positive	Positive	Positive	Positive	Negative	Positive	Negative	Negative	08-Jul	09-Jul	
143	Negative	Positive	Negative	Negative					09-Jul	10-Jul	
144	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative	09-Jul	09-Jul	
145	Negative	Positive	Positive	Negative	Negative	Positive	Positive	Negative	07-Jul	08-Jul	
147	Negative	Negative	Negative	Negative	Negative	Positive	Negative	Negative	07-Jul	07-Jul	
154	Negative	Positive	Negative	Negative	Negative	Positive	Positive	Negative	09-Jul	09-Jul	
157	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative	09-Jul	09-Jul	
159	Negative	Positive	Negative	Negative	Positive	Positive	Positive	Negative	08-Jul	09-Jul	
160	Negative	Positive	Negative	Negative	Negative	Positive	Positive	Negative	08-Jul	09-Jul	
163	Negative	Positive	Negative	Negative	Negative	Positive	Positive	Negative	08-Jul	09-Jul	
167	Equivocal	Positive	Negative	Negative	Negative	Positive	Positive	Negative	10-Jul	10-Jul	
169	Negative	Positive	Negative	Negative	Negative	Negative	Negative	Negative	08-Jul	09-Jul	
174	NT	NT	NT	NT	NT	NT	NT	NT	13-Jul	15-Jul	
176	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative	08-Jul	09-Jul	B-cells serum 3 - Weak reaction - probably positive, but below current threshold
186	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative	08-Jul	08-Jul	
190	Equivocal	Equivocal	Equivocal	Negative	Negative	Positive	Negative	Negative	08-Jul	08-Jul	
191	Negative	Negative	Negative	Negative	Negative	Positive	Negative	Negative	08-Jul	08-Jul	
193	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative	09-Jul	09-Jul	
194	Negative	Positive	Negative	Negative	Equivocal	Positive	Equivocal	Negative	08-Jul	08-Jul	
195	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	Sampels delayed in transit
201	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative	08-Jul	09-Jul	
202	Negative	Negative	Negative	Negative	Negative	Positive	Negative	Negative	08-Jul	08-Jul	
204	Negative	Positive	Negative	Negative	Negative	Positive	Positive	Negative	09-Jul	09-Jul	
209	Negative	Positive	Negative	Negative	Negative	Positive	Positive	Negative	08-Jul	09-Jul	
218	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative	09-Jul	10-Jul	
220	Negative	Positive	Negative	Negative	Negative	Positive	Positive	Negative	08-Jul	09-Jul	
227	NT	NT	NT	NT	NT	NT	NT	NT	08-Jul	08-Jul	Technical failure
235	Negative	Positive	Negative	Negative	Negative	Positive	Positive	Negative	08-Jul	08-Jul	
238	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative	08-Jul	09-Jul	
245	Negative	Positive	Negative	Negative	Negative	Positive	Positive	Negative	08-Jul	09-Jul	
246	Negative	Positive	Negative	Negative	Negative	Positive	Positive	Negative	08-Jul	08-Jul	
252	Negative	Positive	Negative	Negative	Negative	Positive	Positive	Negative	09-Jul	09-Jul	
262	Negative	Positive	Negative	Negative	Negative	Positive	Equivocal	Negative	08-Jul	09-Jul	
271	NT	NT	NT	NT	NT	NT	NT	NT	26-Jul	NT	Sampels delayed in transit
283	Negative	Positive	Negative	Negative	Positive	Positive	Negative	Negative	08-Jul	08-Jul	
284	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative	08-Jul	08-Jul	

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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	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	40
114	206	392	199	179	208	282			258 (Neg+50 linear channel)	Median linear channel	No	94
115	229	426	216	219	220	373			>40 Median linear channel shifts	Median linear channel	Yes	
116	0.26	2.59	0.26	0.2	0.21	21.7			Ratio >1.7	Median log channel	No	
117	6.71	15.89	7.15	6.89	6.36	74.56			Ratio >1.3	Median log channel	Yes	
118	157	320	183	191	140	733			162 (140+22)	Median linear channel	Yes	90
119	0.32	1.12	0.308	0.277	0.226	2.75			Ratio >1.289 (B-line -1.45)	MnIX		97
120	1.05	2.8	1.08	0.89	95	5486			Ratio >1.6	Median	No	100
122	9	29	10	8	8		106	36	3SD	Geomean linear values	No	98
126	138.5	330.5	133	111.5	113	723			>80 shifts	Median linear channel	No	
130	175	375	184	165	173	350			>40		No	
136	2.9	27	2.7	2.7	2.07	298			NR >200	Mean channel	No	98
138	0.07	0.27	0.07	0.07	0	0.66			>0.20	D value Kolmogorov-Smirnoff	No	
139	0.32	1.41	0.4	0.34	0.3	1.2			≥1.5 of neg mean log channel	Mean log channel	No	
142	187	589	192	185	157.7	5187			165.2 Median log channel 3SD	Median log channel	No	95
143	7	69	9	-2	20	713			≥40	Geomean linear channel	No	85
144	MFI				1686						No	
	Ratio 1.08	3.01	1.16	0.98	1	6.17			1.7	MFI	No	
145	0.31	1.852	0.402	0.313	1.1	57.6			Med log ch test/Med log ch neg >mean +2SD	Median log channel		99
147	195	205	146	141	188	547			>40 linear channel shift	Median linear channel	No	100
154	76	425	86	71	69	1.032			Median > 150% control and shape of the curve	MFI	No	
157	152	176	153	149	148	408			163 (Neg+15)	Median linear channel	No	76
159	172	326	171	148	147	472			187 (40 mean linear channel shift)	Mean linear channel	No	
160	7.8	48.4	7.4	6.8	6.5	403			>12.9 (Neg+2SD)	Mean linear channel	No	
163	1.7	13.9	1.5	1	1	9.7			2.3	Geomean log channel	Yes	96
167	273	641	248	232	195	12764			2SD	Median log channel	No	86
169	MLC 16.68	99.08	21.47	19.18	44.3	562.66						
	NR 38	223	48	43		1225			Positive = NR>180	Mean log channel	No	
174												
176	SI 0.12	1.3	0.12	0.04	0	1.4						
	MESF 1.513	14.279	1.56	1.293	1.189	16.69					No	
186	0.66	4.55	0.594	0.498	0.495	11.6			1.5 x local negative	MFI log channel	No	99
190	240.67	238.33	200	183.33	154.33	67.3			Ratio samples/Neg >1.5	Median log channel	No	80
191	-0.8	1.98	2.41	1.65	0	233			MFI >15	MFI	Yes	100
193	4.62	39.21	5.04	3.89	3.52	395.72			Neg control mean x2.5	Geometric mean linear channel	No	
194	0.14	5.2	0.24	0.08	0.2	50			R>0.7	Median log	No	91
195	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
201	0.284	-1.4	0.295	0.235	0.226	28.8			x-mean sample/x-mean NC ≥ 2	x-mean	No	97
202	0.5	1.5	1.4	0.3	0.3	90.2			5% above the local negative control	Linear scale		
204	0.3	3.39	0.3	0.31	0.33	39.5			0.50 (1.5x local neg)	Mean log channel	No	
209	1.2	3.9	1.1	1	2.16	859			Ratio = 4.0	Geomean log channel	Yes	96
218	364	1627	328	236	1047	2023			1047x1.2=1256.4	Geometric mean MFI	No	
220	140	161	146.5	137	132.63		583	308	40 linear channel shift	Median linear channels	No	95
227	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
235	3.06	16.25	3.19	4.07	2.69	626.43			±2SD	Median log channel	No	85
238	616	934	610	623	620	1597			MESF sample/MESF neg control		No	
245	0.5	19.5	2	1	4	11.5			7 linear channel shift	Mean linear channel	Yes	100
246	2.1%	66.0%	1.4%	1.1%	10.4%	31.0%			30%		Yes	97
252	1.01	2.28	1.05	0.34	67.32	128.64			XM median channel/Neg median channel	Median channel ratio	No	70
262	Ratio	1.8			1288	26834			Ratio >2			
	Lysis	17%							Lysis >12%	Median log channel	No	87
271	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
283	0.3965	6.784	-0.0585	0.0815					>2 channel shift	Channel shift	No	
284	52	155	50	45	53	388			Ratio >1.2	Median log channel	No	

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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	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	40
114	420	561	438	368	412	575			472 (326+60 linear channel)	Median linear channel	No	94
115	399	666	446	389	397	629			>60 Median linear channel shifts	Median linear channel	Yes	
116	1.61	15	3.33	1.46	2.13	33.75			Ratio >1.7	Median log channel	No	
117	11.87	84.29	33.27	11.58	11.74	272			Ratio >1.5	Median log channel	Yes	
118	143	216	162	150	141	414			167 (141+26)	Median linear channel	Yes	90
119	5.45	22.7	6.45	4.04	1.903	17.6			Ratio >1.7 (B-line 1.5-1.7)	MnIX		97
120	1.02	8.5	2.1	1.12	324.5	11595.5			Ratio >2	Median	No	100
122	66	240	137	33.5	39.5		498	186	3SD	Geomean linear values	Yes	98
126	503.5	652.5	537.5	449	380	814			>80 shifts	Median linear channel	No	
130	350	605	435	290	297	546			>80		No	
139	2.97	15.1	4.68	3.96	3.38	10.8			≥2 of neg mean log channel	Mean log channel	No	
142	957	2961	1146	1025	1000	13701			1335.3 Median log channel 3SD	Median log channel	No	
144	MFI				8112							
	Ratio 1.15	4.23	1.59	1.06	1	4.03			2.5	MFI	No	
145	1.25	11.4	2.66	1.37	1.1	57.6			Med log ch test/Med log ch neg >mean +2SD	Median log channel	No	95
147	231	339	260	185	229	611			>40 linear channel shift	Median linear channel	No	100
154	231	3056	657	132	240	3946			Median > 250% control and shape of the curve	MFI	No	
157	185	289	202	171	195	539			230 (Neg+35) 2SD	Median linear channel	No	76
159	394	611	439	304	300	650			360 (60 mean linear channel shift)	Mean linear channel	No	
160	79	713.5	128.5	52.5	50.5	824			>101.1 (Neg+2SD)	Mean linear channel	No	
163	1.2	6.6	1.9	1.1	1	2.6			1.7	Geomean log channel	Yes	96
167	1380	7710	1974	1205	1019	47334			2SD	Median log channel	No	86
169	MLC 83.19	295.02	100.57	99.03	206	697.27						
	NR 40	143	49	48		339			Positive = NR>200	Mean log channel	No	85
174												
176	SI -0.04	0.83	0.22	-0.14	0	0.48						
	MESF 9.729	84.481	16.486	7.865	10.566	33.081					No	
186	2.43	12.1	4.02	1.92	2	34.2			2 x local negative	MFI	No	99
190	192.67	634.67	212	121	153.5	251			Ratio samples/Neg >2.5	Median log channel	No	80
191	20	71	24	15	0	437			MFI >35	MFI	Yes	100
193	62.8	526.54	139.68	53.65	59.79	913.57			Neg control mean x2.5	Geometric mean linear channel	No	
194	1	8.5	1.2	0.3	2.7	51			R>1	Median	No	91
195	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
201	2.35	12.4	3.95	1.75	1.86	60			x-mean sample/x-mean NC ≥ 2.5	x-mean	No	93
202	2.7	25.8	6.5	5	2.3	92.7			8% above the local negative control	Linear scale		
204	3.45	25.6	4.4	1.28	1.8	64.7			3.6 (2x local neg)	Mean log channel	No	
209	1.3	10	2.3	1.1	1044	3185			Ratio = 3	Ratio Geomean log channel	Yes	96
218	4873	1627	4821	4682	7256	4678			7.256x1.7=12335	Geometric MFI	No	
220	218.75	300.5	241	203.5	188.25		430	669	40 linear channel shift	Median linear channels	No	95
227	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
235	11.44	32.34	25.71	8.98	10.55	252.48			±4SD	Median log channel	No	85
238	1032	2598	1211	998	870	8722			MESF sample/MESF neg control		No	
245	6.5	113.5	22	3.5	17	42			15 linear channel shift	Mean linear channel	Yes	100
246	26.0%	95.5%	59.7%	22.4%	24.6%	86.1%			30%		Yes	97
252	1.13	6.79	1.77	1.05	71.69	235.01			XM median channel/Neg median channel	Median channel ratio	No	70
262	Ratio	4.7			2356	69459			Ratio sample/neg>2			
	Lysis	76%							Lysis >12%	Median log channel	No	
271	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
283	47.1045	68.957	6.037	-13.1255					>10 channel shift	Channel shift	No	
284	91	386	112	63	94	4067			Ratio >1.2	Median log channel	No	