

HLA-B27 TYPING RESULTS OF SAMPLES 1B09&10/2016  
DISPATCHED ON 27TH SEPTEMBER 2016

**UK NEQAS FOR H&I SCHEME 1B - HLA-B27 TESTING**

**Summary of Results**

HLA-B27 results	115	119	Donor HLA type	1B09/2016	HLA-A1, A3; B27, B44; Cw2, Cw16; DR4, DR17; DQ2, DQ8
HLA-B27 Positive	72	3	Donor HLA type	1B10/2016	HLA-A24, A32; B7, B61; Cw2, Cw7; DR9, DR17; DQ2, DQ9
Negative	43	116			
NT/Equivocal	10	6			
% Positive	62.6%	2.5%			
% Negative	37.4%	97.5%			

Lab No	Result 1B09/2016	Result 1B10/2016	Date received	Date tested	Method	Primers and Probes	PCR-SSP	Detection system	High Resolution Typing HLA-B*27 alleles 1B09/2016	High Resolution Typing HLA-B*27 alleles 1B10/2016	Comments
1	Positive	Negative	28-Sep	05-Oct	SSP	Alta Bioscience	Gel				
3	NT	NT	NT	NT	NT	NT	NT				No results returned
4	Negative	Negative	27-Sep	11-Oct	SSP	Own design	Gel				
7	Equivocal	Negative	28-Sep	28-Sep	Flow Cytometry	Flow Cytometry					Patient samples with such results would be referred for PCR analysis
8	Negative	Negative	27-Sep	12-Oct	Flow Cytometry	Flow Cytometry					
9	Positive	Negative	28-Sep	30-Sep	SSP	Own design	Gel		B*27:12		
10	Negative	Negative	28-Sep	28-Sep	Flow Cytometry	Flow Cytometry					
11	Positive	Negative	28-Oct	05-Oct	Luminex	Own design	Gel		B*27:12		
12	Positive	Negative	28-Sep	06-Oct	SSP	Own design	Gel				
14	Positive	Negative	28-Sep	30-Sep	SSP	Own design	Gel				
15	Positive	Negative	28-Sep	03-Oct	PCR-SSP	Own design	Gel		B*27:12		
16	Positive	Negative	28-Sep	30-Sep	SSP, Luminex	Oleup, One Lambda	Gel, Fluorescence		B*27:12		
17	Positive	Negative	08-Oct	20-Oct	Flow Cytometry, SSP	Oleup	Gel				
19	Positive	Negative	28-Sep	29-Sep	SSP, Luminex	Own design	Gel				
20	Positive	Negative	29-Sep	29-Sep	Flow Cytometry, SSP	Flow Cytometry, SSP			B*27:12/26		Sample showed unusual reactivity by flow cytometry. It was weakly positive with the use of Beckton Dickinson B27 antibody and negative with One Lambda B27 antibody. This prompted the test to be completed by PCR-SSP where the uncommon B*27:12 was detected (B*27:26 cannot be ruled out)
21	Negative	Negative	27-Sep	28-Sep	Flow Cytometry	in-house					
22	Positive	Negative	29-Sep	06-Oct	RT-PCR	in-house			B*27:12		
23	Positive	Negative	28-Sep	10-Oct	SSP	Own design	Gel		B*27:12		
24	Positive	Negative	21-Sep	05-Oct	SSP	Oleup	Gel		B*27:12		
26	Negative	Negative	28-Sep	28-Sep	SSP	Own design	Gel				
27	Negative	Negative	28-Sep	28-Sep	Flow Cytometry	Flow Cytometry					
28	Positive	Negative	28-Sep	04-Oct	SSO				B*27:12		
29	Positive	Negative	29-Sep	04-Oct	SSP/SSO	Biofortuna	Gel		B*27:12		
31	Negative	Negative	28-Sep	28-Sep	Flow Cytometry	Phoenix Flow					
32	Negative	Negative	27-Sep	13-Oct	Flow Cytometry	Flow Cytometry					
34	Positive	Negative	28-Sep	28-Sep	SSP	Oleup	Gel		B*27:12		
35	Positive	Negative	28-Sep	06-Oct	SSP	Own design	Gel		B*27:12		
37	Positive	Negative	28-Sep	29-Sep	SSP	Own design	Gel, Fluorescence				
39	Negative	Negative	29-Sep	03-Oct	SSP	Own design	Gel				
40	Positive	Negative	28-Sep	10-Oct	Flow Cytometry	Flow Cytometry					
41	Positive	Negative	28-Sep	11-Oct	SSP	Own design	Gel				
42	Positive	Negative	28-Sep	04-Oct	Luminex	Own design	Gel		B*27:12		
45	Positive	Negative	28-Sep	04-Oct	SSP	Own design	Gel		B*27:12		
46	Negative	Negative	28-Sep	09-Oct	Flow Cytometry	Flow Cytometry					Sample 1B09 peak has fallen directly on the decision line. Although the median is "Negative", this would require confirmation by genetic testing
47	Negative	Negative	29-Sep	29-Sep	Flow Cytometry	Flow Cytometry					
48	Positive	Negative	29-Sep	06-Oct	SSP	Invitrogen	Gel		B*27:12		
54	Positive	Negative	28-Sep	06-Oct	SSP	Own design	Gel				
55	Negative	Negative	30-Sep	14-Oct	SSP	Hain Lifesciences	Fluorescence				
57	Negative	Negative	28-Sep	13-Oct	Flow Cytometry	Flow Cytometry					
58	Positive	Negative	28-Sep	29-Sep	SSP	Innotrain	Gel				
62	Positive	Negative	28-Sep	28-Sep	SSP, SBT	Oleup	Fluorescence				
66	Positive	Negative	29-Sep	10-Oct	RT-PCR - TAGMAN	Own design	Fluorescence				
67	Negative	Negative	28-Sep	28-Sep	Flow Cytometry	Flow Cytometry					
68	Negative	Negative	28-Sep	28-Sep	Flow Cytometry	Flow Cytometry					
72	NT	NT	04-Oct	04-Oct	SSP	TIB MOLBIOL	Fluorescence				HLA-B27 testing currently being validated
76	NT	NT	28-Sep	28-Sep	Flow Cytometry	Flow Cytometry					Unable to perform NEQAS or patient testing due to production facility failure
78	Positive	Negative	29-Sep	07-Oct	SSP	Commercial	Gel				
83	Negative	Negative	28-Sep	29-Sep	Flow Cytometry	Flow Cytometry					
84	Negative	Negative	28-Sep	28-Sep	Flow Cytometry, SSP	Oleup	Gel				
85	Negative	Negative	28-Sep	30-Sep	RT-PCR	Own design	Fluorescence (Tagman probes)				
86	Positive	Negative	28-Sep	05-Oct	SSP	Invitrogen	Gel				
90	Negative	Negative	29-Sep	29-Sep	Flow Cytometry	Flow Cytometry					
93	Negative	Negative	28-Oct	13-Oct	Flow Cytometry	Flow Cytometry					
96	Positive	Negative	29-Sep	30-Sep	SSP	Oleup	Gel				
101	Positive	Negative	28-Sep	04-Oct	SSP	Oleup	Gel				
103	Negative	Negative	29-Sep	30-Sep	Flow Cytometry	Flow Cytometry					
104	Equivocal	Negative	29-Sep	29-Sep	Flow Cytometry	Flow Cytometry					Determination by PCR: NEG
106	Negative	Negative	29-Sep	11-Oct	Flow Cytometry	Flow Cytometry					
107	Positive	Negative	04-Oct	06-Oct	SSP	EuroArray	Fluorescence				
108	Positive	Negative	29-Sep	03-Oct	SSP	Oleup	Gel				
109	Positive	Negative	28-Sep	11-Oct	SSP	LinkSeq HLA-B27	Gel				
110	Positive	Negative	28-Sep	29-Sep	Flow Cytometry, SSP	Commercial	Gel				
111	Negative	Negative	29-Sep	30-Sep	Flow Cytometry	Flow Cytometry					
112	Positive	Positive	30-Sep	13-Oct	SSP	Own design	Gel				
113	Positive	Negative	28-Sep	28-Sep	SSP	Oleup	Gel				
115	Positive	Negative	28-Sep	10-Oct	SSP	Oleup	Gel				
126	Positive	Negative	03-Oct	10-Oct	RT-PCR	Own design	Fluorescence				
127	Positive	Negative	28-Sep	04-Oct	Microarray	Microarray					
128	Positive	Negative	04-Oct	07-Oct	Flow Cytometry, Luminex	Flow Cytometry, Luminex					1B09 was negative by Flow cytometry
129	Negative	Negative	29-Sep	29-Sep	SSO	Oleup	Gel				
130	Positive	Negative	28-Sep	29-Sep	Cytotoxicity, SSP	Oleup	Gel				1B09/2016 Weak/Neg reaction with some antisera - CDC. DNA testing - B*27:12
131	Negative	Negative	28-Sep	30-Sep	Flow Cytometry	Flow Cytometry					
133	Positive	Negative	28-Sep	30-Sep	Flow Cytometry, SSP	Oleup	Gel				We also confirm by SSR LP typing - Sample 1B09 the presence of 7B*27:12
137	Negative	Equivocal	28-Sep	29-Sep	Flow Cytometry	Flow Cytometry					
142	Negative	Negative	29-Sep	04-Oct	RT-PCR	RT-PCR					
153	Negative	Negative	28-Sep	29-Sep	Flow Cytometry	Flow Cytometry					
154	Positive	Negative	28-Sep	30-Sep	SSP	Oleup	Gel				
156	Positive	Negative	30-Sep	17-Oct	RT-PCR	Oleup	Gel				
158	Positive	Negative	04-Oct	11-Oct	SSP	Oleup	Gel				
174	Positive	Negative	03-Oct	08-Oct	SSP/SSO, Microarray	Oleup	Gel				
176	Negative	Negative	03-Oct	03-Oct	Cytotoxicity	Cytotoxicity					
185	Positive	Negative	28-Sep	04-Oct	SSP	Oleup	Gel				
198	Positive	Negative	28-Sep	30-Sep	Flow Cytometry	Flow Cytometry					Sample 1B10 showed HLA-B7 crossreaction
199	Positive	Negative	03-Oct	06-Oct	RT-PCR	Linkate Biosciences	Fluorescence				
209	Positive	Negative	29-Sep	03-Oct	SSP	Commercial	Gel				
219	Negative	Negative	06-Oct	07-Oct	SSP	Clontar	Fluorescence				
223	Positive	Negative	28-Sep	04-Oct	SSP	Invitrogen	Gel				
225	Positive	Negative	04-Oct	07-Oct	SSP	Commercial	Gel				
232	Positive	Negative	03-Oct	07-Oct	SSP	Oleup	Gel				
234	Positive	Negative	03-Oct	04-Oct	Molecular Serological	Oleup	Gel				
236	Negative	Negative	05-Oct	06-Oct	SSO	Oleup	Gel				
245	Positive	Negative	28-Sep	04-Oct	SSO	Oleup	Gel				
253	Positive	Negative	03-Oct	07-Oct	RT-PCR	Oleup	Gel				
255	Positive	Negative	29-Sep	04-Oct	RT-PCR	Oleup	Gel				
256	Negative	Positive	29-Sep	28-Sep	Flow Cytometry	Flow Cytometry					
257	Positive	Negative	27-Sep	27-Sep	SSP	Oleup	Gel				
269	Negative	Equivocal			SSP	EuroImmun, Euroarray					Samples seems to be HLA-B27 pos, but also some non HLA-B27:01 alleles are possible (B*07:197, 15:342, 37:02, 47:04, 47:05, 48:26)
273	Positive	Negative	29-Sep	04-Oct	SSP	Oleup	Gel				
276	Positive	Negative	28-Sep	10-Oct	SSP/RT-PCR	Linkage biosciences	Melting Point				
278	Positive	Negative	03-Oct	13-Oct	Microarray	Microarray					
279	Negative	Negative	28-Sep	30-Sep	Cytotoxicity	Cytotoxicity					Sample 1B09/2016: Exon2 - Neg, Exon3 - Pos
285	Negative	Negative	28-Sep	29-Sep	Cytotoxicity	Cytotoxicity					Sample 1B10/2016: Exon2 - Neg, Exon3 - Neg
288	Equivocal	Equivocal	28-Sep	29-Sep	Flow Cytometry	Flow Cytometry					1B09: Equivocal (BD), Weak Pos (BC) 1B10: Neg (BD), Pos (BC) Technical issue?
292	Negative	Positive	30-Sep	30-Sep	Cytotoxicity	Cytotoxicity					
295	Positive	Negative	29-Sep	29-Sep	Flow Cytometry	Flow Cytometry					
300	Negative	Negative	20-Oct	20-Oct	SSP	Innotrain	Gel				Delivery delay due to customs
305	Positive	Negative	27-Sep	14-Oct	SSP	Commercial	Gel				
306	Positive	Negative	28-Sep	06-Oct	SSP	Sciences Biomark inc	Fluorescence				
307	Positive	Negative	28-Sep	17-Oct	SSP	Oleup	Gel				
310	Negative	Negative	29-Sep	30-Sep	Flow Cytometry	Flow Cytometry					
317	Positive	Negative	10-Oct	16-Oct	SSP	Oleup	Gel				
319	Equivocal	Negative	28-Sep	30-Sep	RT-PCR	RT-PCR					Discrepant results from different assays for sample 1B09
323	Negative	Negative	30-Sep	03-Oct	Cytotoxicity	Cytotoxicity					
324	Negative	Negative	29-Sep	29-Sep	Flow Cytometry	Flow Cytometry					
325	Positive	Negative	28-Sep	04-Oct	SSP	BAG Healthcare	Gel				
326	Negative	Negative	29-Sep	30-Sep	Flow Cytometry	Flow Cytometry					
327	Positive	Negative	05-Oct	12-Oct	SSP	Oleup	Gel				
329	Positive	Negative	28-Sep	03-Oct	SSO	AnDiaTec	Fluorescence				
334	Equivocal	Negative	28-Sep	28-Sep	Flow Cytometry	Flow Cytometry					Sample 1B09 would be sent to another laboratory
339	Negative	Negative	03-Oct	11-Oct	SSP	Own design	Fluorescence				
340	Equivocal	Negative	28-Sep	06-Oct	PCR-SSP	Own design	Fluorescence				We used two sets of primers, discordant results observed
348	Negative	Negative	03-Oct	03-Oct	Flow Cytometry	Flow Cytometry					
349	Equivocal	Negative	28-Sep	28-Sep	Flow Cytometry	Flow Cytometry					
353	Positive	Negative	28-Sep	06-Oct	SSP, SSO	Oleup	Fluorescence				
356	Negative	Negative	04-Oct	04-Oct	Flow Cytometry	Flow Cytometry					Sample delivery delay

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Lab No	Source of pos/neg control cells used (if applicable)	Monoclonal 1			Monoclonal 2			Monoclonal 3		
		Designation	Specificity	Manufacturer	Designation	Specificity	Manufacturer	Designation	Specificity	Manufacturer
3		HLA-B27 FITC	Clone GS145.2	BD	CD3 PE	Clone SK7	BD			
7	Enzo Life Sciences	FITC	Anti-HLA-B27	BD	PE/FITC	Anti CD3	BD			
10	In-house	HLA-B27 FITC	HLA-B27	One Lambda	CD3 PE	CD3	BD			
17	In-house	B27 FITC	B27	One Lambda	CD3 PE	CD3	BD			
20	In-house	Anti B27-FITC/CD3-PE	B27+B7	BD	Anti B27-FITC	B27	One Lambda			
21		HLA-B27	HLA-B27 FITC	One Lambda	HLA-B27/HLA-B7	HLA-B27-FITC/HLA-B7-PE	Beckman Coulter			
27	Neg = Immunotrol cells (Beckman Coulter) Pos = Pheonix Flow CRISP HLA B27 pos cells	Duraclone B27	CD3, HLA-B27, HLA-B7	Beckman Coulter						
31	Positive control cells not used	MSIgG1 RDI/MsIgG2a FITC	Isotype control	Beckman Coulter	HLA-B27 FITC/B7 PE	B7/B27	Beckman Coulter			
32		PF/FITC	B7/B27	Beckman Coulter	PE/FITC	IgG/IgG2	Beckman Coulter			
40		HLA-B27 PE		Beckman Coulter	CD3-PE-DY649		Beckman Coulter			
46	Axxora	Anti HLA-B27	FITC	BD	Anti CD3	PE	BD			
47	In-house	ABC m3 IgG2a	HLA-B27	Beckman Coulter	FD705 IgG2b	HLA-B27	Beckman Coulter	BB7.1 IgG1	HLA-B7	Beckman Coulter
57	In-house	IgG2a	HLA-B27	Beckman Coulter	IgG2b	HLA-B27	Beckman Coulter	IgG1K	CD3	Beckman Coulter
67		PE- anti-Human-HLA-B27	clone FD705 and ABCm3	Beckman Coulter	PE - Dyomics649- anti-Human CD3	clone UCHT1	Beckman Coulter	unlabeled anti-Human B7	Clone BB7.1	Beckman Coulter
68	Crisp HLA-B27	HLA-B27/B7	HLA-B27-FITC/B7-PE	Beckman Coulter	HLA-B27	HLA-B27-FITC	One Lambda			
76		FD705	HLA-B27	Beckman Coulter	ABCm3	HLA-B27	Beckman Coulter	BB7.1	HLA-B7	Beckman Coulter
83	HLA B27 CRISP positive control cells	HLA-B27	FITC	Beckman Coulter	HLA-B7	PE	Beckman Coulter	CD3	PC5	Beckman Coulter
84	Enzo Life Sciences	B7/B27	B7/B27	Beckman Coulter						
90		HLA-B27	R-PE	Beckman Coulter	CD3	PE-Dyomics649	Beckman Coulter	B7	Clone BB7.1	Beckman Coulter
93	Beckman+One Lambda	B27	B27	One Lambda	B27	B27	Beckman Coulter			
103	Phoenix	HLA-B27-FITC/HLA-B7-PE	HLA-B27	Beckman Coulter						
104		Anti-HLA-B27	FITC/CD3 PE	BD						
106		HLA-B27	HLA-B27	One Lambda	HLA-B27	HLA-B7/B27	Immunotech			
110		Anti-HLA-B27 FITC	FD705-9E1E10	One Lambda						
111	In-house	Anti-HLA-B27 FITC	Clone GS145.2	BD	CD3 PE	Clone SK7	BD			
128		lotest HLA-B27 FITC	HLA-B27	Beckman Coulter	lotest HLA-B7 PE	HLA-B7	Beckman Coulter	CD45 PerCp-Cy5.5	Lymphocytes gating	BD
131	Phoenix	HLA-B27-FITC/HLA-B7-PE	HLA-B27	Beckman Coulter						
133	BD			BD			BD			
137		HLA-ABC m3/BB7.1	HLA-B27/B7	Immunotech	MPC-11	HLA-B27	One Lambda			
153	In-house, Commercial	HLA-B27 FITC	IgG2b FD705	One Lambda	HLA-B27-FITC/B7-PE	IgG2a-IgG1	Immunotech			
198		HLA-B27 testing on T-cells	anti-HLA-B27 FITC + anti-CD3-PE	BD	HLA-B27 control +B7 crossreaction	anti-HLA-B27 FITC + anti-CD3-PE	Beckman Coulter	Isotype control	IgG2a-FITC and IgG1-PE	Beckman Coulter
256		Anti-HLA-B27	HLA-B27	BD	Anti-CD3	CD3	BD			
288		Anti-HLA-B27 FITC	HLA-B27	BD and Beckman Coulter	Anti-CD3 PE	CD3	BD	Anti-HLA-B7 PE	HLA-B7	Beckman Coulter
295	In-house	Anti-HLA-B27 FITC	Clone GS145.2	BD	Anti-CD3 PE	Clone SK7	BD			
310	In-house	lotest HLA-B27 FITC/B7 PE	HLA-B27	Beckman Coulter	lotest HLA-B27 FITC/B7 PE	HLA-B7	Beckman Coulter			
324		HLA-B27 FITC	HLA-B27	Beckman Coulter	HLA-B7 PE	HLA-B7	Beckman Coulter			
326	In-house	lotest HLA-B27 FITC, HLA-B7 PE	HLA-B27	Beckman Coulter	MO AB B27 FITC	HLA-B27	One Lambda			
334		HLA-B27 FITC		Beckman Coulter	HLA-B7 PE		Beckman Coulter			
348		CD3 PE/HLA-B27 FITC	HLA-B27	BD						
349		Anti-CD3 PE		BD	Anti HLA-B27 FITC		BD			
356		Duraclone B27	CD3, Clone UCHT1	Beckman Coulter	Duraclone B27	HLA-B27, Clone ABCm3	Beckman Coulter	Duraclone B27	HLA-B27, Clone FD705	Beckman Coulter

NEQ-115

Issue 2

P. 2 of 2