

**UK NEQAS for H&I Scheme 2A - Cytotoxic Crossmatching**

PBL/T-CELL AND B-CELL CROSSMATCHING RESULTS WITHOUT DTT OF SAMPLE 2A 02/2017 WB

DESPATCHED ON 31ST JANUARY 2017

HLA PHENOTYPE OF BLOOD DONOR: HLA-A1, A2; B44, B57; Cw5, Cw6; DR4, DR7; DQ8, DQ9

					Summary of Results												
					PBL				T-Cells				B-Cells				
Total tested	8	8	6	7	16	16	16	15	9	10	9	9					
Positive	0	3	1	2	0	15	0	0	1	7	4	5					
Negative	8	5	5	5	16	1	16	15	8	3	5	4					
NT/Equivocal	2	2	4	3	4	4	4	5	13	12	13	13					
% Positive	0.0%	37.5%	16.7%	28.6%	0.0%	93.8%	0.0%	0.0%	11.1%	70.0%	44.4%	55.6%					
% Negative	100.0%	62.5%	83.3%	71.4%	100.0%	6.3%	100.0%	100.0%	88.9%	30.0%	55.6%	44.4%					
Consensus	Not Assessed*	Not Assessed*	Not Assessed*	Not Assessed*	Not Assessed*	Not Assessed*	Not Assessed*	Not Assessed*	Not Assessed*	Not Assessed*	Not Assessed*	Not Assessed*					
HLA Antibody Specificity (Defined By CDC)	?Bw6	B44, Cw5, DR4	A10, B16, DQ1	A3	?Bw6	B44, Cw5, DR4	A10, B16, DQ1	A3	?Bw6	B44, Cw5, DR4	A10, B16, DQ1	A3					
Lab No.	PBL Assessment	T Cell Assessment	B Cell Assessment	Without DTT				Without DTT				Without DTT				Comments	
				Serum 1	Serum 2	Serum 3	Serum 4	Serum 1	Serum 2	Serum 3	Serum 4	Serum 1	Serum 2	Serum 3	Serum 4		
9	YES	YES	YES	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative	B cell results not reported due to insufficient B cell viability	
11	YES	YES	YES	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative	Results not able to be reported due to extremely poor cell viability. Sample integrity appeared compromised. The mononuclear cell layer obtained following density grade centrifugation was contaminated with a very high proportion of red blood cells.	
12	YES	YES	YES	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	Unable to report B cells due to high percentage of cell death	
14		YES	YES													Poor cell viability in B cell preparation, fresh sample would be requested in clinical circumstances	
20	YES		YES	Negative	Negative	Negative	Negative	Negative	Positive	Negative	Negative	Negative	Negative	Negative	Negative		
23		YES	YES					Negative	Positive	Negative	Negative	Equivocal	Equivocal	Equivocal	Equivocal	B cell viability was too low (10%) to make an assessment	
24		YES	YES					Negative	Positive	Negative	Negative	Equivocal	Equivocal	Equivocal	Equivocal	Cell viability of B cells only ~50%, unclear reactions assessed as equivocal	
25		YES	YES					Negative	Positive	Negative	Negative	Negative	Positive	Positive	Positive		
28		YES	YES					Negative	Negative	Negative	Negative	Negative	Positive	Equivocal	Negative		
34		YES	YES					Negative	Positive	Negative	Negative	NT	NT	NT	NT	B cells for this sample showed very low viability. Not possible to assess pos/neg	
35	YES	YES		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	B cell viability very poor resulting in unreadable test	
38	YES	YES	YES	Negative	Negative	Negative	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Positive	Cells were received a day late and the viability was extremely low. The crossmatch results were	
39		YES	YES					Negative	Positive	Negative	Negative	Negative	Positive	Negative	Positive	2A 02/207 has not been reported due to concerns over sample integrity. At the start of the CDC process, the B cell viability was 99% however, by the end of the process the B cells had all died resulting in a failed test. Although the T cell assay worked, we have decided not to report these results based on the quality of B cells for this assay and the compromised results	
41		YES	YES					Negative	Positive	Negative	Negative	Negative	Positive	Negative	Positive	Extremely poor viability of B-cells rendering plates unreadable	
42	YES		YES	Negative	Positive	Equivocal	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Positive	Positive	Very poor quality of blood sample. High red cell, platelet and non-lymphocyte contamination. B-cell T and B-cell viabilities were low. The samples are tested in replicates and there was insufficient	
45		YES	YES					Negative	Positive	Negative	Negative	Negative	Positive	Positive	Positive		
51		YES	YES					Negative	Positive	Negative	Negative	Negative	Positive	Positive	Positive		
54		YES	YES					Negative	Positive	Negative	Negative	Negative	Positive	Positive	Positive		
58		YES	YES					Negative	Positive	Negative	Negative	Negative	Positive	Positive	Positive		
117	YES			Negative	Negative	Equivocal	Positive	Negative	Positive	Negative	Negative	Negative	Positive	Positive	Positive	B cells mostly dead after assay, therefore not interpret-able & would not accept in a clinical setting	
136		YES						NT	NT	NT	NT					Unable to report due to poor B-cell viability	
149	YES			Negative	Negative	Negative	Equivocal									The bad viability made the reading difficult	
205	YES		YES	Negative	Negative	Positive	Positive					Negative	Negative	Positive	Positive	Micro agglutination detected on blood before any separation process	
212	YES	YES	YES									Negative	Negative	Negative	Positive		
311	YES	YES	YES									NT	NT	NT	NT	Results are uninterpretable for B lymphocytes due to excessive mortality	
315	YES	YES	YES					Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative		

\* Sample 2A02/2017 WB not assessed due to poor quality blood sample

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PBL/T-CELL AND B-CELL CROSSMATCHING RESULTS WITHOUT DTT OF SAMPLE 2A 02/2017 WB

DESPATCHED ON 31ST JANUARY 2017

Lab No.	PBL without DTT				T-cell without DTT				B-cell without DTT				Cell viability %		
	Serum 1 reaction strength	Serum 2 reaction strength	Serum 3 reaction strength	Serum 4 reaction strength	Serum 1 reaction strength	Serum 2 reaction strength	Serum 3 reaction strength	Serum 4 reaction strength	Serum 1 reaction strength	Serum 2 reaction strength	Serum 3 reaction strength	Serum 4 reaction strength	PBL	T-cells	B-cells
9	0	4	0	0	0	2	0	0	0	4	0	0	95	95	90
11		4				6			NT	NT	NT	NT	85	95	0
12	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
14					0	6	0	0	NT	NT	NT	NT		90	<10
20	10%	10%	10%	10%									90		30
23					1	6	1	1						90	10
24					10%	100%	10%	10%	70%	100%	90%	90%	90		50
25					1	4	1	1	1	4	-	1	80		80
28					1	1	1	1	NT	NT	NT	NT	95		50
34					1	2	1	1	NT	NT	NT	NT	99		1
35	NT	NT	NT	NT	NT	NT	NT	NT					20	20	
38	1	1	1	1	1	4	1	1	1	6	1	4	90	95	80
39					NT	NT	NT	NT	NT	NT	NT	NT		99	0
41					5-10%	80-90%	5-10%	5%	NT	NT	NT	NT		100	20
42	<10%	20-40%		<10%					NT	NT	NT	NT	90		90
45					1	8	1	NT	1	6	6	NT		70	50
51					0	6	0	0	8	8	8	6		95	90
54					<10%	50%	<10%	<10%	NT	NT	NT	NT		95	20
58					5%	50%	5%	5%	NT	NT	NT	NT		95	0
117	1	1	0	4									70		
136	NT	NT	NT	NT											
149													76		
205			50-75%	50-75%			50-75%	50-75%			75-100%	75-100%	90	90	90
212													99	99	99
311					1	2	1	1	NT	NT	NT	NT		100	0
315					1	6	1	1	1	4	1	1	80	80	50

**UK NEQAS for H&I Scheme 2A - Cytotoxic Crossmatching**

PBL/T-CELL AND B-CELL CROSSMATCHING RESULTS WITH DTT OF SAMPLE 2A 02/2017 WB

DESPATCHED ON 31ST JANUARY 2017

HLA PHENOTYPE OF BLOOD DONOR: HLA-A1, A2; B44, B57; Cw5, Cw6; DR4, DR7; DQ8, DQ9

				Summary of Results												
				PBL				T-Cells				B-Cells				
Total tested	7	7	6	6	15	15	15	14	11	11	10	9				
Positive	0	3	1	1	0	13	1	1	0	5	3	2				
Negative	7	4	5	5	15	2	14	13	11	6	7	7				
NT/Equivocal	2	2	3	3	3	3	3	4	9	9	10	11				
% Positive	0.0%	42.9%	16.7%	16.7%	0.0%	86.7%	6.7%	7.1%	0.0%	45.5%	30.0%	22.2%				
% Negative	100.0%	57.1%	83.3%	83.3%	100.0%	13.3%	93.3%	92.9%	100.0%	54.5%	70.0%	77.8%				
Consensus	Not Assessed*	Not Assessed*	Not Assessed*	Not Assessed*	Not Assessed*	Not Assessed*	Not Assessed*	Not Assessed*	Not Assessed*	Not Assessed*	Not Assessed*	Not Assessed*				
HLA Antibody Specificity (Defined By CDC)	?Bw6	B44, Cw5, DR4	A10, B16, DQ1	A3	?Bw6	B44, Cw5, DR4	A10, B16, DQ1	A3	?Bw6	B44, Cw5, DR4	A10, B16, DQ1	A3				
Lab No.	PBL Assessment	T Cell Assessment	B Cell Assessment	With DTT				With DTT				With DTT				Comments
				Serum 1	Serum 2	Serum 3	Serum 4	Serum 1	Serum 2	Serum 3	Serum 4	Serum 1	Serum 2	Serum 3	Serum 4	
9	YES	YES	YES	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative	
11	YES	YES	YES	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative	NT	NT	NT	NT	
12	YES	YES	YES	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	B cell results not reported due to insufficient B cell viability Results not able to be reported due to extremely poor cell viability. Sample integrity appeared compromised. The mononuclear cell layer obtained following density grade centrifugation was contaminated with a very high proportion of red blood cells. Unable to report B cells die to high percentage of cell death
14		YES	YES					Negative	Positive	Negative	Negative	NT	NT	NT	NT	
15		YES	YES					Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	
20	YES			Negative	Negative	Negative	Negative					Negative	Negative	Negative	Negative	Poor cell viability in B cell preparation, fresh sample would be requested in clinical circumstances Cell viability of B cells only ~50%, unclear reactions assessed as equivocal
24		YES	YES					Negative	Positive	Negative	Negative	Negative	Positive	Positive	Equivocal	
25		YES	YES					Negative	Negative	Negative	Negative	Negative	Negative	Negative	Negative	
28		YES	YES					Negative	Positive	Negative	Negative	NT	NT	NT	NT	
34		YES	YES					Negative	Positive	Negative	Negative	NT	NT	NT	NT	
35	YES	YES	YES	NT	NT	NT	NT	NT	NT	NT	NT					B cells for this sample showed very low viability. Not possible to assess pos/neg B cell viability very poor resulting in unreadable test
38	YES	YES	YES	Negative	Negative	Negative	Negative	Negative	Positive	Negative	Negative	Negative	Positive	Negative	Negative	
39	YES	YES	YES					Negative	NT	NT	NT	NT	NT	NT	NT	Cells were received a day late and the viability was extremely low. The crossmatch results were therefore uninterpretable
41		YES	YES					Negative	Positive	Negative	Negative	NT	NT	NT	NT	
42	YES		YES	Negative	Positive	Equivocal	Negative					Negative	Positive	Equivocal	Negative	2A 02/2017 has not been reported due to concerns over sample integrity. At the start of the CDC process, the B cell viability was 99% however, by the end of the process the B cells had all dies resulting in a failed test. Although the T cell assay worked, we have decided not to report these results based on the quality of B cells for this assay and the compromised results
45		YES	YES					Negative	Positive	Negative	NT	Negative	Positive	Positive	NT	Extremely poor viability of B-cells rendering plates unreadable Very poor quality of blood sample. High red cell, platelet and non-lymphocyte contamination. B-cell not reported due to very poor viability
51		YES	YES					Negative	Positive	Positive	Positive					T and B-cell viabilities were low. The samples are tested in replicates and there was insufficient agreement between the different reactions for serum 4
58		YES	YES					Negative	Positive	Negative	Negative	NT	NT	NT	NT	
149	YES		YES	Negative	Negative	Negative	Equivocal									Unable to report due to poor B-cell viability
205	YES		YES	Negative	Negative	Positive	Positive					Negative	Negative	Positive	Positive	
212	YES	YES	YES									Negative	Negative	Negative	Positive	
311	YES	YES	YES					Negative	Positive	Negative	Negative	NT	NT	NT	NT	Results are uninterpretable for B lymphocytes due to excessive mortality
315	YES	YES	YES					Negative	Positive	Negative	Negative	Negative	Negative	Negative	Negative	

\* Sample 2A02/2017 WB not assessed due to poor quality blood sample

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PBL/T-CELL AND B-CELL CROSSMATCHING RESULTS WITH DTT OF SAMPLE 2A 02/2017 WB

DESPATCHED ON 31ST JANUARY 2017

Lab No.	PBL with DTT				T-cell with DTT				B-cell with DTT				Cell viability %		
	Serum 1 reaction strength	Serum 2 reaction strength	Serum 3 reaction strength	Serum 4 reaction strength	Serum 1 reaction strength	Serum 2 reaction strength	Serum 3 reaction strength	Serum 4 reaction strength	Serum 1 reaction strength	Serum 2 reaction strength	Serum 3 reaction strength	Serum 4 reaction strength	PBL	T-cells	B-cells
9	0	4	0	0	0	2	0	0	0	4	0	0	95	95	90
11		4				6			NT	NT	NT	NT	85	95	0
12	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT
14					0	4	0	0	NT	NT	NT	NT		90	<10
15					0	0	0	0	0	0	0	0		95	95
20	10%	10%	10%	10%					10%	10%	10%	10%	90		30
24					10%	90%	10%	10%	60%	100%	80%	70%		90	50
25					1	1	1	1	1	1	1	1		80	80
28					1	4	1	1	NT	NT	NT	NT		95	50
34					1	2	1	1	NT	NT	NT	NT		99	1
35	NT	NT	NT	NT	NT	NT	NT	NT					20	20	
38	1	1	1	1	1	4	1	1	1	4	1	1	90	95	80
39					NT	NT	NT	NT	NT	NT	NT	NT		99	0
41					10%	20-50%	10%	10%	NT	NT	NT	NT		100	20
42	<10%	20-40%		<10%					<10%	40-60%		<10%	90		90
45					1	8	1	NT	1	6	6	NT		70	50
51					0	8	4	2	1	6	6	NT		95	90
58					5%	100%	5%	5%	NT	NT	NT	NT		95	0
149													76		
205			50-75%	50-75%			50-75%	50-75%			75-100%	75-100%	90	90	90
212													99	99	99
311					1	2	1	1	NT	NT	NT	NT		100	0
315					1	6	1	1	1	1	1	1	80	80	50