

## EQA round: IH4/23 - Blood Group Serology

Deadline: 17.11.2023

Setup: all data

AV = assigned value  
 RV = reference value  
 >>> ... expected result  
 > ... acceptable result  
 ± ... result not assessed

N<sub>tot</sub> = total number of the results  
 N<sub>rel</sub> = relative number of the results

N<sub>eva</sub> = number of the results assessed  
 N<sub>suc</sub> = number of successful results  
 S<sub>rel</sub> = relative success

Test Sample Group	Frequency of the results				Success		
	AV	N <sub>tot</sub>	N <sub>rel</sub> [%]	Result	N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub> [%]
<b>Set 1 and 2</b>							
(700) <b>AB0 blood group</b>		167			167	167	100
<b>Samples E1 and S1</b>		167			167	167	100
All results	RV >>>	167	100	Blood group: A			
<b>Samples E2 and S2</b>		167			167	167	100
All results	RV >>>	167	100	Blood group: 0			
(703) <b>A subgroup</b>		53			53	53	100
<b>Samples E1 and S1</b>		53			53	53	100
All results	RV >>>	53	100	A subgroup A1			
<b>Samples E2 and S2</b>		53			53	53	100
All results	RV >>>	53	100	Not specified			
(705) <b>Rh D antigen (blood-donor)</b>		95			95	95	100
<b>Samples E1 and S1</b>		95			95	95	100
All results	RV >>>	95	100	Positive (RhD+)			
<b>Samples E2 and S2</b>		95			95	95	100
All results	RV >>>	95	100	Positive (RhD+)			
(709) <b>Rh D antigen (recipient/ pregnant/ newborn)</b>		159			159	159	100
<b>Samples E1 and S1</b>		159			159	159	100
All results	RV >>>	159	100	Positive (RhD+)			
<b>Samples E2 and S2</b>		159			159	159	100
All results	RV >>>	159	100	Positive (RhD+)			
(715) <b>Antigen C</b>		88			88	88	100
<b>Samples E1 and S1</b>		88			88	88	100
All results	RV >>>	88	100	Positive			
<b>Samples E2 and S2</b>		88			88	88	100
All results	RV >>>	88	100	Positive			
(716) <b>Antigen c</b>		88			88	87	99
<b>Samples E1 and S1</b>		88			88	87	99
All results	RV >>>	87	99	Negative			
		1	1,1	Positive			
<b>Samples E2 and S2</b>		88			88	88	100
All results	RV >>>	88	100	Negative			
(718) <b>Antigen E</b>		89			89	89	100
<b>Samples E1 and S1</b>		89			89	89	100
All results	RV >>>	89	100	Negative			
<b>Samples E2 and S2</b>		89			89	89	100
All results	RV >>>	89	100	Negative			
(719) <b>Antigen e</b>		88			88	88	100
<b>Samples E1 and S1</b>		88			88	88	100
All results	RV >>>	88	100	Positive			
<b>Samples E2 and S2</b>		88			88	88	100
All results	RV >>>	88	100	Positive			
(717) <b>Antigen C<sup>w</sup></b>		74			74	73	99
<b>Samples E1 and S1</b>		74			74	74	100
All results	RV >>>	74	100	Negative			
<b>Samples E2 and S2</b>		74			74	73	99
All results	RV >>>	1	1,4	Not specified			
		73	99	Negative			
(720) <b>Antigen K</b>		95			95	94	99
<b>Samples E1 and S1</b>		95			95	94	99
All results	RV >>>	94	99	Negative			
		1	1,1	Positive			
<b>Samples E2 and S2</b>		95			95	95	100
All results	RV >>>	95	100	Negative			
(721) <b>Antigen k</b>		46			46	46	100
<b>Samples E1 and S1</b>		46			46	46	100
All results	RV >>>	46	100	Positive			
<b>Samples E2 and S2</b>		46			46	46	100
All results	RV >>>	46	100	Positive			
(738) <b>Antigen Kp<sup>a</sup></b>		16			16	16	100
<b>Samples E1 and S1</b>		16			16	16	100
All results	RV >>>	16	100	Negative			

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	AV	N <sub>tot</sub>	N <sub>rel</sub> [%]	Result	N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub> [%]	
<b>Samples E2 and S2</b>		16				16	16	100
All results	RV >>>	16	100	Negative				
(739) <b>Antigen Kp<sup>b</sup></b>		9				9	9	100
<b>Samples E1 and S1</b>		9				9	9	100
All results	RV >>>	9	100	Positive				
<b>Samples E2 and S2</b>		9				9	9	100
All results	RV >>>	9	100	Positive				
(729) <b>Antigen Jk<sup>a</sup></b>		42				42	42	100
<b>Samples E1 and S1</b>		42				42	42	100
All results	RV >>>	42	100	Negative				
<b>Samples E2 and S2</b>		42				42	42	100
All results	RV >>>	42	100	Positive				
(730) <b>Antigen Jk<sup>b</sup></b>		42				42	41	98
<b>Samples E1 and S1</b>		42				42	41	98
All results		1	2,4	Negative				
	RV >>>	41	98	Positive				
<b>Samples E2 and S2</b>		42				42	41	98
All results		1	2,4	Negative				
	RV >>>	41	98	Positive				
(727) <b>Antigen Fy<sup>a</sup></b>		43				43	43	100
<b>Samples E1 and S1</b>		43				43	43	100
All results	RV >>>	43	100	Positive				
<b>Samples E2 and S2</b>		43				43	43	100
All results	RV >>>	43	100	Negative				
(728) <b>Antigen Fy<sup>b</sup></b>		43				43	43	100
<b>Samples E1 and S1</b>		43				43	43	100
All results	RV >>>	43	100	Negative				
<b>Samples E2 and S2</b>		43				43	43	100
All results	RV >>>	43	100	Positive				
(722) <b>Antigen M</b>		42				42	42	100
<b>Samples E1 and S1</b>		42				42	42	100
All results	RV >>>	42	100	Positive				
<b>Samples E2 and S2</b>		42				42	42	100
All results	RV >>>	42	100	Positive				
(723) <b>Antigen N</b>		37				37	37	100
<b>Samples E1 and S1</b>		37				37	37	100
All results	RV >>>	37	100	Negative				
<b>Samples E2 and S2</b>		37				37	37	100
All results	RV >>>	37	100	Positive				
(724) <b>Antigen S</b>		43				43	43	100
<b>Samples E1 and S1</b>		43				43	43	100
All results	RV >>>	43	100	Negative				
<b>Samples E2 and S2</b>		43				43	43	100
All results	RV >>>	43	100	Negative				
(725) <b>Antigen s</b>		41				41	41	100
<b>Samples E1 and S1</b>		41				41	41	100
All results	RV >>>	41	100	Positive				
<b>Samples E2 and S2</b>		41				41	41	100
All results	RV >>>	41	100	Positive				
(733) <b>Antigen Le<sup>a</sup></b>		35				35	35	100
<b>Samples E1 and S1</b>		35				35	35	100
All results	RV >>>	35	100	Negative				
<b>Samples E2 and S2</b>		35				35	35	100
All results	RV >>>	35	100	Positive				
(734) <b>Antigen Le<sup>b</sup></b>		35				35	31	89
<b>Samples E1 and S1</b>		35				35	31	89
All results		4	11	Negative				
	RV >>>	31	89	Positive				
<b>Samples E2 and S2</b>		35				35	35	100
All results	RV >>>	35	100	Negative				
(731) <b>Antigen Lu<sup>a</sup></b>		26				26	26	100
<b>Samples E1 and S1</b>		26				26	26	100
All results	RV >>>	26	100	Negative				
<b>Samples E2 and S2</b>		26				26	26	100
All results	RV >>>	26	100	Negative				
(732) <b>Antigen Lu<sup>b</sup></b>		25				25	25	100
<b>Samples E1 and S1</b>		25				25	25	100
All results	RV >>>	25	100	Positive				

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Test Sample Group	Frequency of the results					Success		
	AV	N <sub>tot</sub>	N <sub>rel</sub> [%]	Result	N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub> [%]	
<b>Samples E2 and S2</b>		25				25	25	100
All results	RV >>>	25	100	Positive				
<b>(726) Antigen P1</b>		29				29	29	100
<b>Samples E1 and S1</b>		29				29	29	100
All results	RV >>>	29	100	Negative				
<b>Samples E2 and S2</b>		29				29	29	100
All results	RV >>>	29	100	Positive				
<b>(740) Antigen Wr<sup>a</sup></b>		7				7	7	100
<b>Samples E1 and S1</b>		7				7	7	100
All results	RV >>>	7	100	Negative				
<b>Samples E2 and S2</b>		7				7	7	100
All results	RV >>>	7	100	Negative				
<b>(737) Direct Coombs (antiglobulin) test</b>		140				140	140	100
<b>Samples E1 and S1</b>		140				140	140	100
All results	RV >>>	140	100	Negative				
<b>Samples E2 and S2</b>		140				140	140	100
All results	RV >>>	140	100	Negative				
<b>(741) Antibody screening (IAT, blood donor)</b>		87				87	87	100
<b>Samples E1 and S1</b>		87				87	87	100
All results	RV >>>	87	100	Positive				
<b>Samples E2 and S2</b>		87				87	87	100
All results	RV >>>	87	100	Positive				
<b>(743) Antibody screening (IAT, recipient)</b>		151				151	150	99
<b>Samples E1 and S1</b>		151				151	151	100
All results	RV >>>	151	100	Positive				
<b>Samples E2 and S2</b>		151				151	150	99
All results	RV >>>	1	0,7	Not specified				
		150	99	Positive				
<b>(745) Antibody screening (IAT, pregnant)</b>		121				121	121	100
<b>Samples E1 and S1</b>		121				121	121	100
All results	RV >>>	121	100	Positive				
<b>Samples E2 and S2</b>		121				121	121	100
All results	RV >>>	121	100	Positive				
<b>(747) Antibody screening (enzyme test)</b>		113				113	113	100
<b>Samples E1 and S1</b>		113				113	113	100
All results	RV >>>	113	100	Positive				
<b>Samples E2 and S2</b>		113				113	113	100
All results	RV >>>	113	100	Positive				
<b>(750) Antibody identification</b>		52				52	50	96
<b>Samples E1 and S1</b>		52				52	51	98
All results	RV >>>	51	98	anti-E; anti-K; anti-S				
		1	1,9	anti-E; anti-S; anti-Fyb				
<b>Samples E2 and S2</b>		52				52	51	98
All results	RV >>>	51	98	anti-c				
		1	1,9	anti-c; anti-E; anti-Lua				
<b>(752) Antibody titre, Sample 1: 1st antibody</b>		35				0		
<b>Samples E1 and S1</b>		35				0		
All results	±	2	5,7	titre 4				
	±	1	2,9	titre 8				
	±	9	26	titre 16				
	±	12	34	titre 32				
	±	8	23	titre 64				
	±	3	8,6	titre 128				
<b>(753) Antibody titre, Sample 1: 2nd antibody</b>		33				0		
<b>Samples E1 and S1</b>		33				0		
All results	±	1	3	titre 4				
	±	1	3	titre 8				
	±	13	39	titre 16				
	±	13	39	titre 32				
	±	4	12	titre 64				
	±	1	3	titre 128				
<b>(754) Antibody titre, Sample 1: 3rd antibody</b>		35				0		
<b>Samples E1 and S1</b>		35				0		
All results	±	3	8,6	titre 4				
	±	9	26	titre 8				
	±	15	43	titre 16				
	±	4	11	titre 32				
	±	4	11	titre 64				

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<b>(756) Antibody titre, Sample 2: 1st antibody</b>		35				0	
<b>Samples E2 and S2</b>		35				0	
All results	±	2	5,7	titre 1			
	±	7	20	titre 2			
	±	11	31	titre 4			
	±	11	31	titre 8			
	±	3	8,6	titre 16			
	±	1	2,9	titre 64			
<b>Set 3</b>							
<b>(760) Crossmatch</b>		134			134	133	99
<b>Sample S1</b>		134			134	134	100
All results	RV >>>	134	100	Crossmatch successful			
<b>Sample S2</b>		134			134	133	99
All results		1	0,7	Crossmatch not successful			
	RV >>>	133	99	Crossmatch successful			
<b>(761) Crossmatch (segment K1)</b>		134			134	133	99
<b>Sample S1</b>		134			134	134	100
All results	RV >>>	134	100	Positive test			
<b>Sample S2</b>		134			134	133	99
All results		1	0,7	Not specified			
	>	1	0,7	Negative test			
	RV >>>	132	99	Positive test			
<b>(762) Serve transfusion product? (segment K1) (transfusion in non-emergency mode)</b>		134				0	
<b>Sample S1</b>		134				0	
All results	±	133	99	Impossible, risk of haemolysis			
	±	1	0,7	Decision depends on results of other tests not performed in our laboratory			
<b>Sample S2</b>		134				0	
All results	±	133	99	Impossible, risk of haemolysis			
	±	1	0,7	Decision depends on results of other tests not performed in our laboratory			
<b>(764) Crossmatch (segment K2)</b>		134			134	134	100
<b>Sample S1</b>		134			134	134	100
All results	RV >>>	134	100	Positive test			
<b>Sample S2</b>		134			134	134	100
All results	RV >>>	134	100	Negative test			
<b>(765) Serve transfusion product? (segment K2) (transfusion in non-emergency mode)</b>		134				0	
<b>Sample S1</b>		134				0	
All results	±	132	99	Impossible, risk of haemolysis			
	±	2	1,5	Decision depends on results of other tests not performed in our laboratory			
<b>Sample S2</b>		134				0	
All results	±	78	58	Decision depends on results of other tests not performed in our laboratory			
	±	4	3	Only if more suitable products are not available			
	±	52	39	Possible			