

## EQA round: IH2/24 - Blood Group Serology

Deadline: 31.5.2024

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>		159			159	158	99
<b>Samples E1 and S1</b>		159			159	159	100
All results							
		>	8	5	Not specified		
	RV	>>>	151	95	Blood group: A		
<b>Samples E2 and S2</b>		159			159	158	99
All results							
			1	0,6	Blood group: A		
	RV	>>>	158	99	Blood group: AB		
(703) <b>A subgroup</b>		47			47	43	91
<b>Samples E1 and S1</b>		47			47	47	100
All results							
	RV	>>>	47	100	A subgroup A1		
<b>Samples E2 and S2</b>		47			47	43	91
All results							
			2	4,3	Not specified		
	RV	>>>	43	91	A subgroup A1		
			2	4,3	A subgroup A2		
(705) <b>Rh D antigen (blood-donor)</b>		90			90	90	100
<b>Samples E1 and S1</b>		90			90	90	100
All results							
	RV	>>>	90	100	Negative (RhD-)		
<b>Samples E2 and S2</b>		90			90	90	100
All results							
	RV	>>>	90	100	Positive (RhD+)		
(709) <b>Rh D antigen (recipient/ pregnant/ newborn)</b>		152			152	152	100
<b>Samples E1 and S1</b>		152			152	152	100
All results							
	RV	>>>	152	100	Negative (RhD-)		
<b>Samples E2 and S2</b>		152			152	152	100
All results							
	RV	>>>	152	100	Positive (RhD+)		
(715) <b>Antigen C</b>		84			84	84	100
<b>Samples E1 and S1</b>		84			84	84	100
All results							
	RV	>>>	84	100	Positive		
<b>Samples E2 and S2</b>		84			84	84	100
All results							
	RV	>>>	84	100	Positive		
(716) <b>Antigen c</b>		84			84	84	100
<b>Samples E1 and S1</b>		84			84	84	100
All results							
	RV	>>>	84	100	Positive		
<b>Samples E2 and S2</b>		84			84	84	100
All results							
	RV	>>>	84	100	Negative		
(718) <b>Antigen E</b>		85			85	84	99
<b>Samples E1 and S1</b>		85			85	84	99
All results							
	RV	>>>	84	99	Negative		
			1	1,2	Positive		
<b>Samples E2 and S2</b>		85			85	85	100
All results							
	RV	>>>	85	100	Negative		
(719) <b>Antigen e</b>		84			84	84	100
<b>Samples E1 and S1</b>		84			84	84	100
All results							
	RV	>>>	84	100	Positive		
<b>Samples E2 and S2</b>		84			84	84	100
All results							
	RV	>>>	84	100	Positive		
(717) <b>Antigen C<sup>w</sup></b>		74			74	74	100
<b>Samples E1 and S1</b>		74			74	74	100
All results							
	RV	>>>	74	100	Negative		
<b>Samples E2 and S2</b>		74			74	74	100
All results							
	RV	>>>	74	100	Negative		
(720) <b>Antigen K</b>		91			91	91	100
<b>Samples E1 and S1</b>		91			91	91	100
All results							
	RV	>>>	91	100	Negative		
<b>Samples E2 and S2</b>		91			91	91	100
All results							
	RV	>>>	91	100	Negative		
(721) <b>Antigen k</b>		45			45	45	100
<b>Samples E1 and S1</b>		45			45	45	100
All results							
	RV	>>>	45	100	Positive		
<b>Samples E2 and S2</b>		45			45	45	100
All results							
	RV	>>>	45	100	Positive		

Setup: all data

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>(738) Antigen Kp<sup>a</sup></b>		15			15	15	100	
<b>Samples E1 and S1</b>		15			15	15	100	
All results	RV >>>	15	100	Negative				
<b>Samples E2 and S2</b>		15			15	15	100	
All results	RV >>>	15	100	Negative				
<b>(739) Antigen Kp<sup>b</sup></b>		8			8	8	100	
<b>Samples E1 and S1</b>		8			8	8	100	
All results	RV >>>	8	100	Positive				
<b>Samples E2 and S2</b>		8			8	8	100	
All results	RV >>>	8	100	Positive				
<b>(729) Antigen Jk<sup>a</sup></b>		40			40	40	100	
<b>Samples E1 and S1</b>		40			40	40	100	
All results	RV >>>	40	100	Positive				
<b>Samples E2 and S2</b>		40			40	40	100	
All results	RV >>>	40	100	Positive				
<b>(730) Antigen Jk<sup>b</sup></b>		40			40	38	95	
<b>Samples E1 and S1</b>		40			40	38	95	
All results		2	5	Negative				
	RV >>>	38	95	Positive				
<b>Samples E2 and S2</b>		40			40	40	100	
All results	RV >>>	40	100	Negative				
<b>(727) Antigen Fy<sup>a</sup></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	Negative				
<b>(728) Antigen Fy<sup>b</sup></b>		41			41	40	98	
<b>Samples E1 and S1</b>		41			41	41	100	
All results	RV >>>	41	100	Positive				
<b>Samples E2 and S2</b>		41			41	40	98	
All results		1	2,4	Negative				
	RV >>>	40	98	Positive				
<b>(722) Antigen M</b>		39			39	39	100	
<b>Samples E1 and S1</b>		39			39	39	100	
All results	RV >>>	39	100	Positive				
<b>Samples E2 and S2</b>		39			39	39	100	
All results	RV >>>	39	100	Negative				
<b>(723) Antigen N</b>		37			37	35	95	
<b>Samples E1 and S1</b>		37			37	37	100	
All results	RV >>>	37	100	Negative				
<b>Samples E2 and S2</b>		37			37	35	95	
All results		2	5,4	Negative				
	RV >>>	35	95	Positive				
<b>(724) Antigen S</b>		39			39	38	97	
<b>Samples E1 and S1</b>		39			39	39	100	
All results	RV >>>	39	100	Positive				
<b>Samples E2 and S2</b>		39			39	38	97	
All results	RV >>>	38	97	Negative				
		1	2,6	Positive				
<b>(725) Antigen s</b>		40			40	39	98	
<b>Samples E1 and S1</b>		40			40	40	100	
All results	RV >>>	40	100	Negative				
<b>Samples E2 and S2</b>		40			40	39	98	
All results		1	2,5	Negative				
	RV >>>	39	98	Positive				
<b>(733) Antigen Le<sup>a</sup></b>		31			31	31	100	
<b>Samples E1 and S1</b>		31			31	31	100	
All results	RV >>>	31	100	Negative				
<b>Samples E2 and S2</b>		31			31	31	100	
All results	RV >>>	31	100	Positive				
<b>(734) Antigen Le<sup>b</sup></b>		30			30	29	97	
<b>Samples E1 and S1</b>		30			30	29	97	
All results		1	3,3	Negative				
	RV >>>	29	97	Positive				
<b>Samples E2 and S2</b>		30			30	30	100	
All results	RV >>>	30	100	Negative				
<b>(731) Antigen Lu<sup>a</sup></b>		25			25	25	100	
<b>Samples E1 and S1</b>		25			25	25	100	
All results	RV >>>	25	100	Negative				

Setup: all data

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	Negative				
<b>(732) Antigen Lu<sup>p</sup></b>		23				23	23	100
<b>Samples E1 and S1</b>		23				23	23	100
All results	RV >>>	23	100	Positive				
<b>Samples E2 and S2</b>		23				23	23	100
All results	RV >>>	23	100	Positive				
<b>(726) Antigen P1</b>		27				27	25	93
<b>Samples E1 and S1</b>		27				27	27	100
All results	RV >>>	1	3,7	Negative				
	RV >>>	26	96	Positive				
<b>Samples E2 and S2</b>		27				27	25	93
All results		2	7,4	Negative				
	RV >>>	25	93	Positive				
<b>(740) Antigen Wr<sup>a</sup></b>		8				8	8	100
<b>Samples E1 and S1</b>		8				8	8	100
All results	RV >>>	8	100	Negative				
<b>Samples E2 and S2</b>		8				8	8	100
All results	RV >>>	8	100	Negative				
<b>(737) Direct Coombs (antiglobulin) test</b>		129				129	129	100
<b>Samples E1 and S1</b>		129				129	129	100
All results	RV >>>	129	100	Negative				
<b>Samples E2 and S2</b>		129				129	129	100
All results	RV >>>	129	100	Negative				
<b>(741) Antibody screening (IAT, blood donor)</b>		82				82	82	100
<b>Samples E1 and S1</b>		82				82	82	100
All results	RV >>>	82	100	Positive				
<b>Samples E2 and S2</b>		82				82	82	100
All results	RV >>>	82	100	Positive				
<b>(743) Antibody screening (IAT, recipient)</b>		143				143	143	100
<b>Samples E1 and S1</b>		143				143	143	100
All results	RV >>>	143	100	Positive				
<b>Samples E2 and S2</b>		143				143	143	100
All results	RV >>>	143	100	Positive				
<b>(745) Antibody screening (IAT, pregnant)</b>		117				117	117	100
<b>Samples E1 and S1</b>		117				117	117	100
All results	RV >>>	117	100	Positive				
<b>Samples E2 and S2</b>		117				117	117	100
All results	RV >>>	117	100	Positive				
<b>(747) Antibody screening (enzyme test)</b>		107				107	105	98
<b>Samples E1 and S1</b>		107				107	106	99
All results		1	0,9	Not specified				
	RV >>>	83	78	Negative				
	RV >>>	23	21	Positive				
<b>Samples E2 and S2</b>		107				107	106	99
All results	RV >>>	106	99	Negative				
		1	0,9	Positive				
<b>(750) Antibody identification</b>		54				54	54	100
<b>Samples E1 and S1</b>		54				54	54	100
All results	RV >>>	54	100	anti-s				
<b>Samples E2 and S2</b>		54				54	54	100
All results	RV >>>	54	100	anti-Fya				
<b>(752) Antibody titre, Sample 1: 1st antibody</b>		36				0		
<b>Samples E1 and S1</b>		36				0		
All results		± 4	11	titre 4				
		± 6	17	titre 8				
		± 16	44	titre 16				
		± 5	14	titre 32				
		± 4	11	titre 64				
		± 1	2,8	titre 128				
<b>(756) Antibody titre, Sample 2: 1st antibody</b>		36				0		
<b>Samples E2 and S2</b>		36				0		
All results		± 1	2,8	titre 16				
		± 4	11	titre 32				
		± 9	25	titre 64				
		± 14	39	titre 128				
		± 6	17	titre 256				
		± 2	5,6	titre 512				

Setup: all data

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 3</b>							
(761) <b>Crossmatch (segment K1)</b>		129			129	129	100
<b>Sample S1</b>		129			129	129	100
All results	RV >>>	129	100	Negative test			
<b>Sample S2</b>		129			129	129	100
All results	RV >>>	129	100	Positive test			
(762) <b>Serve transfusion product? (segment K1)</b> <b>(transfusion in non-emergency mode)</b>		129			0		
<b>Sample S1</b>		129			0		
All results	±	22	17	Impossible, risk of haemolysis			
	±	62	48	Decision depends on results of other tests not performed in our laboratory			
	±	37	29	Only if more suitable products are not available			
	±	8	6,2	Possible			
<b>Sample S2</b>		129			0		
All results	±	129	100	Impossible, risk of haemolysis			
(764) <b>Crossmatch (segment K2)</b>		129			129	129	100
<b>Sample S1</b>		129			129	129	100
All results	RV >>>	129	100	Positive test			
<b>Sample S2</b>		129			129	129	100
All results	RV >>>	129	100	Negative test			
(765) <b>Serve transfusion product? (segment K2)</b> <b>(transfusion in non-emergency mode)</b>		129			0		
<b>Sample S1</b>		129			0		
All results	±	129	100	Impossible, risk of haemolysis			
<b>Sample S2</b>		129			0		
All results	±	2	1,6	Impossible, risk of haemolysis			
	±	67	52	Decision depends on results of other tests not performed in our laboratory			
	±	39	30	Only if more suitable products are not available			
	±	21	16	Possible			