

EQA round: IH2/23 - Blood Group Serology

Deadline: 2.6.2023

Setup: groups - manufacturer of kit

AV = assigned value

RV = reference value

>>> ... expected result

> ... acceptable result

± ... result not assessed

N_{tot} = total number of the resultsN_{rel} = relative number of the resultsN_{eva} = number of the results assessedN_{suc} = number of successful resultsS_{rel} = relative success

Test Sample Group	Frequency of the results					Success		
	AV	N _{tot}	N _{rel} [%]	Result	N _{eva}	N _{suc}	S _{rel} [%]	
Set 1 and 2								
(700) ABO blood group		149			149	149	100	
Samples E1 and S1		149			149	149	100	
(6) APR	RV >>>	2	1,3	Blood group: A				
(14) Bio-Rad	RV >>>	42	28	Blood group: A				
(40) Ortho Clinical Diagnostics	RV >>>	1	0,7	Blood group: A				
(52) Dynex	RV >>>	1	0,7	Blood group: A				
(64) Exbio Olomouc	RV >>>	7	4,7	Blood group: A				
(80) DiaMed	RV >>>	12	8,1	Blood group: A				
(159) Grifols	RV >>>	45	30	Blood group: A				
(172) Immucor	RV >>>	20	13	Blood group: A				
(173) Sanguin	RV >>>	8	5,4	Blood group: A				
(174) IVT Imuno	RV >>>	7	4,7	Blood group: A				
(203) ANTITOXIN	RV >>>	1	0,7	Blood group: A				
(999) another manufacturer	RV >>>	3	2	Blood group: A				
Samples E2 and S2		149			149	149	100	
(6) APR	RV >>>	2	1,3	Blood group: 0				
(14) Bio-Rad	RV >>>	42	28	Blood group: 0				
(40) Ortho Clinical Diagnostics	RV >>>	1	0,7	Blood group: 0				
(52) Dynex	RV >>>	1	0,7	Blood group: 0				
(64) Exbio Olomouc	RV >>>	7	4,7	Blood group: 0				
(80) DiaMed	RV >>>	12	8,1	Blood group: 0				
(159) Grifols	RV >>>	45	30	Blood group: 0				
(172) Immucor	RV >>>	20	13	Blood group: 0				
(173) Sanguin	RV >>>	8	5,4	Blood group: 0				
(174) IVT Imuno	RV >>>	7	4,7	Blood group: 0				
(203) ANTITOXIN	RV >>>	1	0,7	Blood group: 0				
(999) another manufacturer	RV >>>	3	2	Blood group: 0				
(703) A subgroup		44			44	42	95	
Samples E1 and S1		44			44	42	95	
(0) not specified		1	2,3	A subgroup A1				
	RV >>>	42	95	A subgroup A2				
		1	2,3	A subgroup A3				
Samples E2 and S2		44			44	44	100	
(0) not specified	RV >>>	44	100	Not specified				
(705) Rh D antigen (blood-donor)		83			83	83	100	
Samples E1 and S1		83			83	83	100	
(6) APR	RV >>>	4	4,8	Positive (RhD+)				
(14) Bio-Rad	RV >>>	20	24	Positive (RhD+)				
(64) Exbio Olomouc	RV >>>	3	3,6	Positive (RhD+)				
(80) DiaMed	RV >>>	3	3,6	Positive (RhD+)				
(159) Grifols	RV >>>	24	29	Positive (RhD+)				
(172) Immucor	RV >>>	20	24	Positive (RhD+)				
(173) Sanguin	RV >>>	4	4,8	Positive (RhD+)				
(174) IVT Imuno	RV >>>	3	3,6	Positive (RhD+)				
(203) ANTITOXIN	RV >>>	1	1,2	Positive (RhD+)				
(999) another manufacturer	RV >>>	1	1,2	Positive (RhD+)				
Samples E2 and S2		83			83	83	100	
(6) APR	RV >>>	4	4,8	Negative (RhD-)				
(14) Bio-Rad	RV >>>	20	24	Negative (RhD-)				
(64) Exbio Olomouc	RV >>>	3	3,6	Negative (RhD-)				
(80) DiaMed	RV >>>	3	3,6	Negative (RhD-)				
(159) Grifols	RV >>>	24	29	Negative (RhD-)				
(172) Immucor	RV >>>	20	24	Negative (RhD-)				
(173) Sanguin	RV >>>	4	4,8	Negative (RhD-)				
(174) IVT Imuno	RV >>>	3	3,6	Negative (RhD-)				
(203) ANTITOXIN	RV >>>	1	1,2	Negative (RhD-)				
(999) another manufacturer	RV >>>	1	1,2	Negative (RhD-)				
(709) Rh D antigen (recipient/ pregnant/ newborn)		140			140	140	100	
Samples E1 and S1		140			140	140	100	
(6) APR	RV >>>	2	1,4	Positive (RhD+)				
(14) Bio-Rad	RV >>>	40	29	Positive (RhD+)				
(40) Ortho Clinical Diagnostics	RV >>>	1	0,7	Positive (RhD+)				

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Test Sample Group	Frequency of the results					Success		
	AV	N _{tot}	N _{rel} [%]	Result	N _{eva}	N _{suc}	S _{rel} [%]	
(50) Merck	RV	>>>	1	0,7	Positive (RhD+)			
(52) Dynex	RV	>>>	2	1,4	Positive (RhD+)			
(64) Exbio Olomouc	RV	>>>	6	4,3	Positive (RhD+)			
(80) DiaMed	RV	>>>	10	7,1	Positive (RhD+)			
(159) Grifols	RV	>>>	43	31	Positive (RhD+)			
(172) Immucor	RV	>>>	19	14	Positive (RhD+)			
(173) Sanguin	RV	>>>	5	3,6	Positive (RhD+)			
(174) IVT Imuno	RV	>>>	6	4,3	Positive (RhD+)			
(203) ANTITOXIN	RV	>>>	1	0,7	Positive (RhD+)			
(999) another manufacturer	RV	>>>	4	2,9	Positive (RhD+)			
Samples E2 and S2			140			140	140	100
(6) APR	RV	>>>	2	1,4	Negative (RhD-)			
(14) Bio-Rad	RV	>>>	40	29	Negative (RhD-)			
(40) Ortho Clinical Diagnostics	RV	>>>	1	0,7	Negative (RhD-)			
(50) Merck	RV	>>>	1	0,7	Negative (RhD-)			
(52) Dynex	RV	>>>	2	1,4	Negative (RhD-)			
(64) Exbio Olomouc	RV	>>>	6	4,3	Negative (RhD-)			
(80) DiaMed	RV	>>>	10	7,1	Negative (RhD-)			
(159) Grifols	RV	>>>	43	31	Negative (RhD-)			
(172) Immucor	RV	>>>	19	14	Negative (RhD-)			
(173) Sanguin	RV	>>>	5	3,6	Negative (RhD-)			
(174) IVT Imuno	RV	>>>	6	4,3	Negative (RhD-)			
(203) ANTITOXIN	RV	>>>	1	0,7	Negative (RhD-)			
(999) another manufacturer	RV	>>>	4	2,9	Negative (RhD-)			
(715) Antigen C			78			78	78	100
Samples E1 and S1			78			78	78	100
(6) APR	RV	>>>	1	1,3	Negative			
(14) Bio-Rad	RV	>>>	30	38	Negative			
(50) Merck	RV	>>>	1	1,3	Negative			
(64) Exbio Olomouc	RV	>>>	1	1,3	Negative			
(80) DiaMed	RV	>>>	7	9	Negative			
(159) Grifols	RV	>>>	20	26	Negative			
(172) Immucor	RV	>>>	12	15	Negative			
(173) Sanguin	RV	>>>	2	2,6	Negative			
(174) IVT Imuno	RV	>>>	2	2,6	Negative			
(203) ANTITOXIN	RV	>>>	2	2,6	Negative			
Samples E2 and S2			78			78	78	100
(6) APR	RV	>>>	1	1,3	Negative			
(14) Bio-Rad	RV	>>>	30	38	Negative			
(50) Merck	RV	>>>	1	1,3	Negative			
(64) Exbio Olomouc	RV	>>>	1	1,3	Negative			
(80) DiaMed	RV	>>>	7	9	Negative			
(159) Grifols	RV	>>>	20	26	Negative			
(172) Immucor	RV	>>>	12	15	Negative			
(173) Sanguin	RV	>>>	2	2,6	Negative			
(174) IVT Imuno	RV	>>>	2	2,6	Negative			
(203) ANTITOXIN	RV	>>>	2	2,6	Negative			
(716) Antigen c			78			78	78	100
Samples E1 and S1			78			78	78	100
(6) APR	RV	>>>	1	1,3	Positive			
(14) Bio-Rad	RV	>>>	30	38	Positive			
(50) Merck	RV	>>>	1	1,3	Positive			
(64) Exbio Olomouc	RV	>>>	1	1,3	Positive			
(80) DiaMed	RV	>>>	7	9	Positive			
(159) Grifols	RV	>>>	20	26	Positive			
(172) Immucor	RV	>>>	12	15	Positive			
(173) Sanguin	RV	>>>	2	2,6	Positive			
(174) IVT Imuno	RV	>>>	2	2,6	Positive			
(203) ANTITOXIN	RV	>>>	2	2,6	Positive			
Samples E2 and S2			78			78	78	100
(6) APR	RV	>>>	1	1,3	Positive			
(14) Bio-Rad	RV	>>>	30	38	Positive			
(50) Merck	RV	>>>	1	1,3	Positive			
(64) Exbio Olomouc	RV	>>>	1	1,3	Positive			
(80) DiaMed	RV	>>>	7	9	Positive			
(159) Grifols	RV	>>>	20	26	Positive			
(172) Immucor	RV	>>>	12	15	Positive			
(173) Sanguin	RV	>>>	2	2,6	Positive			
(174) IVT Imuno	RV	>>>	2	2,6	Positive			

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	AV	N _{tot}	N _{rel} [%]	Result	N _{eva}	N _{suc}	S _{rel} [%]	
(203) ANTITOXIN	RV	>>>	2	2,6	Positive			
(718) Antigen E			79			79	79	100
Samples E1 and S1			79			79	79	100
(6) APR	RV	>>>	1	1,3	Positive			
(14) Bio-Rad	RV	>>>	31	39	Positive			
(50) Merck	RV	>>>	1	1,3	Positive			
(64) Exbio Olomouc	RV	>>>	1	1,3	Positive			
(80) DiaMed	RV	>>>	7	8,9	Positive			
(159) Grifols	RV	>>>	20	25	Positive			
(172) Immucor	RV	>>>	12	15	Positive			
(173) Sanguin	RV	>>>	2	2,5	Positive			
(174) IVT Imuno	RV	>>>	2	2,5	Positive			
(203) ANTITOXIN	RV	>>>	2	2,5	Positive			
Samples E2 and S2			79			79	79	100
(6) APR	RV	>>>	1	1,3	Negative			
(14) Bio-Rad	RV	>>>	31	39	Negative			
(50) Merck	RV	>>>	1	1,3	Negative			
(64) Exbio Olomouc	RV	>>>	1	1,3	Negative			
(80) DiaMed	RV	>>>	7	8,9	Negative			
(159) Grifols	RV	>>>	20	25	Negative			
(172) Immucor	RV	>>>	12	15	Negative			
(173) Sanguin	RV	>>>	2	2,5	Negative			
(174) IVT Imuno	RV	>>>	2	2,5	Negative			
(203) ANTITOXIN	RV	>>>	2	2,5	Negative			
(719) Antigen e			78			78	77	99
Samples E1 and S1			78			78	77	99
(6) APR	RV	>>>	1	1,3	Positive			
(14) Bio-Rad	RV	>>>	29	37	Positive			
(17) Biogema	RV	>>>	1	1,3	Positive			
(50) Merck	RV	>>>	1	1,3	Positive			
(64) Exbio Olomouc	RV	>>>	1	1,3	Positive			
(80) DiaMed	RV	>>>	7	9	Positive			
(159) Grifols			1	1,3	Negative			
	RV	>>>	19	24	Positive			
(172) Immucor	RV	>>>	12	15	Positive			
(173) Sanguin	RV	>>>	2	2,6	Positive			
(174) IVT Imuno	RV	>>>	2	2,6	Positive			
(203) ANTITOXIN	RV	>>>	2	2,6	Positive			
Samples E2 and S2			78			78	77	99
(6) APR	RV	>>>	1	1,3	Positive			
(14) Bio-Rad	RV	>>>	29	37	Positive			
(17) Biogema	RV	>>>	1	1,3	Positive			
(50) Merck	RV	>>>	1	1,3	Positive			
(64) Exbio Olomouc	RV	>>>	1	1,3	Positive			
(80) DiaMed	RV	>>>	7	9	Positive			
(159) Grifols			1	1,3	Negative			
	RV	>>>	19	24	Positive			
(172) Immucor	RV	>>>	12	15	Positive			
(173) Sanguin	RV	>>>	2	2,6	Positive			
(174) IVT Imuno	RV	>>>	2	2,6	Positive			
(203) ANTITOXIN	RV	>>>	2	2,6	Positive			
(717) Antigen C^w			65			65	65	100
Samples E1 and S1			65			65	65	100
(6) APR	RV	>>>	1	1,5	Negative			
(14) Bio-Rad	RV	>>>	22	34	Negative			
(50) Merck	RV	>>>	1	1,5	Negative			
(64) Exbio Olomouc	RV	>>>	2	3,1	Negative			
(80) DiaMed	RV	>>>	2	3,1	Negative			
(159) Grifols	RV	>>>	19	29	Negative			
(172) Immucor	RV	>>>	12	18	Negative			
(173) Sanguin	RV	>>>	2	3,1	Negative			
(174) IVT Imuno	RV	>>>	2	3,1	Negative			
(203) ANTITOXIN	RV	>>>	2	3,1	Negative			
Samples E2 and S2			65			65	65	100
(6) APR	RV	>>>	1	1,5	Negative			
(14) Bio-Rad	RV	>>>	22	34	Negative			
(50) Merck	RV	>>>	1	1,5	Negative			
(64) Exbio Olomouc	RV	>>>	2	3,1	Negative			
(80) DiaMed	RV	>>>	2	3,1	Negative			

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Test Sample Group	Frequency of the results					Success		
	AV	N _{tot}	N _{rel} [%]	Result	N _{eva}	N _{suc}	S _{rel} [%]	
(159) Grifols	RV	>>>	19	29	Negative			
(172) Immucor	RV	>>>	12	18	Negative			
(173) Sanguin	RV	>>>	2	3,1	Negative			
(174) IVT Imuno	RV	>>>	2	3,1	Negative			
(203) ANTITOXIN	RV	>>>	2	3,1	Negative			
(720) Antigen K			84			84	84	100
Samples E1 and S1			84			84	84	100
(6) APR	RV	>>>	1	1,2	Negative			
(14) Bio-Rad	RV	>>>	29	35	Negative			
(50) Merck	RV	>>>	1	1,2	Negative			
(80) DiaMed	RV	>>>	7	8,3	Negative			
(159) Grifols	RV	>>>	26	31	Negative			
(172) Immucor	RV	>>>	12	14	Negative			
(173) Sanguin	RV	>>>	3	3,6	Negative			
(174) IVT Imuno	RV	>>>	4	4,8	Negative			
(203) ANTITOXIN	RV	>>>	1	1,2	Negative			
Samples E2 and S2			84			84	84	100
(6) APR	RV	>>>	1	1,2	Negative			
(14) Bio-Rad	RV	>>>	29	35	Negative			
(50) Merck	RV	>>>	1	1,2	Negative			
(80) DiaMed	RV	>>>	7	8,3	Negative			
(159) Grifols	RV	>>>	26	31	Negative			
(172) Immucor	RV	>>>	12	14	Negative			
(173) Sanguin	RV	>>>	3	3,6	Negative			
(174) IVT Imuno	RV	>>>	4	4,8	Negative			
(203) ANTITOXIN	RV	>>>	1	1,2	Negative			
(721) Antigen k			46			46	45	98
Samples E1 and S1			46			46	45	98
(14) Bio-Rad	RV	>>>	15	33	Positive			
(64) Exbio Olomouc	RV	>>>	4	8,7	Positive			
(80) DiaMed			1	2,2	Negative			
	RV	>>>	2	4,3	Positive			
(159) Grifols	RV	>>>	4	8,7	Positive			
(172) Immucor	RV	>>>	5	11	Positive			
(173) Sanguin	RV	>>>	9	20	Positive			
(174) IVT Imuno	RV	>>>	1	2,2	Positive			
(203) ANTITOXIN	RV	>>>	4	8,7	Positive			
(999) another manufacturer	RV	>>>	1	2,2	Positive			
Samples E2 and S2			46			46	45	98
(14) Bio-Rad	RV	>>>	15	33	Positive			
(64) Exbio Olomouc	RV	>>>	4	8,7	Positive			
(80) DiaMed			1	2,2	Negative			
	RV	>>>	2	4,3	Positive			
(159) Grifols	RV	>>>	4	8,7	Positive			
(172) Immucor	RV	>>>	5	11	Positive			
(173) Sanguin	RV	>>>	9	20	Positive			
(174) IVT Imuno	RV	>>>	1	2,2	Positive			
(203) ANTITOXIN	RV	>>>	4	8,7	Positive			
(999) another manufacturer	RV	>>>	1	2,2	Positive			
(738) Antigen Kp^a			15			15	15	100
Samples E1 and S1			15			15	15	100
(14) Bio-Rad	RV	>>>	6	40	Negative			
(64) Exbio Olomouc	RV	>>>	1	6,7	Negative			
(80) DiaMed	RV	>>>	2	13	Negative			
(159) Grifols	RV	>>>	3	20	Negative			
(172) Immucor	RV	>>>	2	13	Negative			
(173) Sanguin	RV	>>>	1	6,7	Negative			
Samples E2 and S2			15			15	15	100
(14) Bio-Rad	RV	>>>	6	40	Negative			
(64) Exbio Olomouc	RV	>>>	1	6,7	Negative			
(80) DiaMed	RV	>>>	2	13	Negative			
(159) Grifols	RV	>>>	3	20	Negative			
(172) Immucor	RV	>>>	2	13	Negative			
(173) Sanguin	RV	>>>	1	6,7	Negative			
(739) Antigen Kp^b			8			8	7	88
Samples E1 and S1			8			8	7	88
(14) Bio-Rad	RV	>>>	3	38	Positive			
(64) Exbio Olomouc	RV	>>>	1	13	Positive			
(80) DiaMed			1	13	Negative			

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Test Sample Group	Frequency of the results					Success		
	AV	N _{tot}	N _{rel} [%]	Result	N _{eva}	N _{suc}	S _{rel} [%]	
	RV >>>	1	13	Positive				
(159) Grifols	RV >>>	1	13	Positive				
(172) Immucor	RV >>>	1	13	Positive				
Samples E2 and S2		8			8	7	88	
(14) Bio-Rad	RV >>>	3	38	Positive				
(64) Exbio Olomouc	RV >>>	1	13	Positive				
(80) DiaMed		1	13	Negative				
	RV >>>	1	13	Positive				
(159) Grifols	RV >>>	1	13	Positive				
(172) Immucor	RV >>>	1	13	Positive				
(729) Antigen Jk^a		40			40	40	100	
Samples E1 and S1		40			40	40	100	
(14) Bio-Rad	RV >>>	14	35	Positive				
(50) Merck	RV >>>	1	2,5	Positive				
(52) Dynex	RV >>>	1	2,5	Positive				
(64) Exbio Olomouc	RV >>>	1	2,5	Positive				
(80) DiaMed	RV >>>	2	5	Positive				
(159) Grifols	RV >>>	7	18	Positive				
(172) Immucor	RV >>>	6	15	Positive				
(173) Sanguin	RV >>>	5	13	Positive				
(203) ANTITOXIN	RV >>>	3	7,5	Positive				
Samples E2 and S2		40			40	40	100	
(14) Bio-Rad	RV >>>	14	35	Negative				
(50) Merck	RV >>>	1	2,5	Negative				
(52) Dynex	RV >>>	1	2,5	Negative				
(64) Exbio Olomouc	RV >>>	1	2,5	Negative				
(80) DiaMed	RV >>>	2	5	Negative				
(159) Grifols	RV >>>	7	18	Negative				
(172) Immucor	RV >>>	6	15	Negative				
(173) Sanguin	RV >>>	5	13	Negative				
(203) ANTITOXIN	RV >>>	3	7,5	Negative				
(730) Antigen Jk^b		40			40	38	95	
Samples E1 and S1		40			40	39	98	
(14) Bio-Rad	RV >>>	13	33	Negative				
(50) Merck	RV >>>	1	2,5	Negative				
(52) Dynex	RV >>>	1	2,5	Negative				
(64) Exbio Olomouc	RV >>>	1	2,5	Negative				
(80) DiaMed	RV >>>	2	5	Negative				
(159) Grifols	RV >>>	7	18	Negative				
(172) Immucor	RV >>>	5	13	Negative				
		1	2,5	Positive				
(173) Sanguin	RV >>>	6	15	Negative				
(203) ANTITOXIN	RV >>>	3	7,5	Negative				
Samples E2 and S2		40			40	39	98	
(14) Bio-Rad	RV >>>	13	33	Positive				
(50) Merck	RV >>>	1	2,5	Positive				
(52) Dynex	RV >>>	1	2,5	Positive				
(64) Exbio Olomouc	RV >>>	1	2,5	Positive				
(80) DiaMed		1	2,5	Negative				
	RV >>>	1	2,5	Positive				
(159) Grifols	RV >>>	7	18	Positive				
(172) Immucor	RV >>>	6	15	Positive				
(173) Sanguin	RV >>>	6	15	Positive				
(203) ANTITOXIN	RV >>>	3	7,5	Positive				
(727) Antigen Fy^a		40			40	40	100	
Samples E1 and S1		40			40	40	100	
(14) Bio-Rad	RV >>>	16	40	Positive				
(64) Exbio Olomouc	RV >>>	2	5	Positive				
(80) DiaMed	RV >>>	2	5	Positive				
(159) Grifols	RV >>>	6	15	Positive				
(172) Immucor	RV >>>	8	20	Positive				
(173) Sanguin	RV >>>	4	10	Positive				
(203) ANTITOXIN	RV >>>	2	5	Positive				
Samples E2 and S2		40			40	40	100	
(14) Bio-Rad	RV >>>	16	40	Positive				
(64) Exbio Olomouc	RV >>>	2	5	Positive				
(80) DiaMed	RV >>>	2	5	Positive				
(159) Grifols	RV >>>	6	15	Positive				
(172) Immucor	RV >>>	8	20	Positive				

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	AV	N _{tot}	N _{rel} [%]	Result	N _{eva}	N _{suc}	S _{rel} [%]	
(173) Sanguin	RV	>>>	4	10	Positive			
(203) ANTITOXIN	RV	>>>	2	5	Positive			
(728) Antigen Fy^p			40			40	40	100
Samples E1 and S1			40			40	40	100
(14) Bio-Rad	RV	>>>	16	40	Negative			
(64) Exbio Olomouc	RV	>>>	2	5	Negative			
(80) DiaMed	RV	>>>	2	5	Negative			
(159) Grifols	RV	>>>	6	15	Negative			
(172) Immucor	RV	>>>	7	18	Negative			
(173) Sanguin	RV	>>>	4	10	Negative			
(203) ANTITOXIN	RV	>>>	3	7,5	Negative			
Samples E2 and S2			40			40	40	100
(14) Bio-Rad	RV	>>>	16	40	Negative			
(64) Exbio Olomouc	RV	>>>	2	5	Negative			
(80) DiaMed	RV	>>>	2	5	Negative			
(159) Grifols	RV	>>>	6	15	Negative			
(172) Immucor	RV	>>>	7	18	Negative			
(173) Sanguin	RV	>>>	4	10	Negative			
(203) ANTITOXIN	RV	>>>	3	7,5	Negative			
(722) Antigen M			40			40	40	100
Samples E1 and S1			40			40	40	100
(14) Bio-Rad	RV	>>>	13	33	Negative			
(52) Dynex	RV	>>>	1	2,5	Negative			
(64) Exbio Olomouc	RV	>>>	2	5	Negative			
(80) DiaMed	RV	>>>	2	5	Negative			
(159) Grifols	RV	>>>	4	10	Negative			
(172) Immucor	RV	>>>	12	30	Negative			
(173) Sanguin	RV	>>>	2	5	Negative			
(183) Immunodiagnostic Systems	RV	>>>	1	2,5	Negative			
(203) ANTITOXIN	RV	>>>	3	7,5	Negative			
Samples E2 and S2			40			40	40	100
(14) Bio-Rad	RV	>>>	13	33	Negative			
(52) Dynex	RV	>>>	1	2,5	Negative			
(64) Exbio Olomouc	RV	>>>	2	5	Negative			
(80) DiaMed	RV	>>>	2	5	Negative			
(159) Grifols	RV	>>>	4	10	Negative			
(172) Immucor	RV	>>>	12	30	Negative			
(173) Sanguin	RV	>>>	2	5	Negative			
(183) Immunodiagnostic Systems	RV	>>>	1	2,5	Negative			
(203) ANTITOXIN	RV	>>>	3	7,5	Negative			
(723) Antigen N			35			35	35	100
Samples E1 and S1			35			35	35	100
(14) Bio-Rad	RV	>>>	12	34	Positive			
(52) Dynex	RV	>>>	1	2,9	Positive			
(64) Exbio Olomouc	RV	>>>	1	2,9	Positive			
(80) DiaMed	RV	>>>	2	5,7	Positive			
(159) Grifols	RV	>>>	4	11	Positive			
(172) Immucor	RV	>>>	9	26	Positive			
(173) Sanguin	RV	>>>	2	5,7	Positive			
(183) Immunodiagnostic Systems	RV	>>>	1	2,9	Positive			
(203) ANTITOXIN	RV	>>>	3	8,6	Positive			
Samples E2 and S2			35			35	35	100
(14) Bio-Rad	RV	>>>	12	34	Positive			
(52) Dynex	RV	>>>	1	2,9	Positive			
(64) Exbio Olomouc	RV	>>>	1	2,9	Positive			
(80) DiaMed	RV	>>>	2	5,7	Positive			
(159) Grifols	RV	>>>	4	11	Positive			
(172) Immucor	RV	>>>	9	26	Positive			
(173) Sanguin	RV	>>>	2	5,7	Positive			
(183) Immunodiagnostic Systems	RV	>>>	1	2,9	Positive			
(203) ANTITOXIN	RV	>>>	3	8,6	Positive			
(724) Antigen S			40			40	40	100
Samples E1 and S1			40			40	40	100
(14) Bio-Rad	RV	>>>	13	33	Negative			
(50) Merck	RV	>>>	1	2,5	Negative			
(52) Dynex	RV	>>>	2	5	Negative			
(64) Exbio Olomouc	RV	>>>	1	2,5	Negative			
(80) DiaMed	RV	>>>	2	5	Negative			
(159) Grifols	RV	>>>	6	15	Negative			

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Deadline: 2.6.2023

Setup: groups - manufacturer of kit

Test Sample Group	Frequency of the results				Success		
	AV	N _{tot}	N _{rel} [%]	Result	N _{eva}	N _{suc}	S _{rel} [%]
(172) Immucor	RV	>>>	8	20	Negative		
(173) Sanguin	RV	>>>	4	10	Negative		
(174) IVT Imuno	RV	>>>	1	2,5	Negative		
(203) ANTITOXIN	RV	>>>	2	5	Negative		
Samples E2 and S2			40			40	40 100
(14) Bio-Rad	RV	>>>	13	33	Negative		
(50) Merck	RV	>>>	1	2,5	Negative		
(52) Dynex	RV	>>>	2	5	Negative		
(64) Exbio Olomouc	RV	>>>	1	2,5	Negative		
(80) DiaMed	RV	>>>	2	5	Negative		
(159) Grifols	RV	>>>	6	15	Negative		
(172) Immucor	RV	>>>	8	20	Negative		
(173) Sanguin	RV	>>>	4	10	Negative		
(174) IVT Imuno	RV	>>>	1	2,5	Negative		
(203) ANTITOXIN	RV	>>>	2	5	Negative		
(725) Antigen s			39			39	39 100
Samples E1 and S1			39			39	39 100
(14) Bio-Rad	RV	>>>	13	33	Positive		
(52) Dynex	RV	>>>	1	2,6	Positive		
(64) Exbio Olomouc	RV	>>>	2	5,1	Positive		
(80) DiaMed	RV	>>>	2	5,1	Positive		
(159) Grifols	RV	>>>	6	15	Positive		
(172) Immucor	RV	>>>	6	15	Positive		
(173) Sanguin	RV	>>>	5	13	Positive		
(174) IVT Imuno	RV	>>>	1	2,6	Positive		
(203) ANTITOXIN	RV	>>>	3	7,7	Positive		
Samples E2 and S2			39			39	39 100
(14) Bio-Rad	RV	>>>	13	33	Positive		
(52) Dynex	RV	>>>	1	2,6	Positive		
(64) Exbio Olomouc	RV	>>>	2	5,1	Positive		
(80) DiaMed	RV	>>>	2	5,1	Positive		
(159) Grifols	RV	>>>	6	15	Positive		
(172) Immucor	RV	>>>	6	15	Positive		
(173) Sanguin	RV	>>>	5	13	Positive		
(174) IVT Imuno	RV	>>>	1	2,6	Positive		
(203) ANTITOXIN	RV	>>>	3	7,7	Positive		
(733) Antigen Le^a			30			30	30 100
Samples E1 and S1			30			30	30 100
(14) Bio-Rad	RV	>>>	12	40	Positive		
(50) Merck	RV	>>>	1	3,3	Positive		
(64) Exbio Olomouc	RV	>>>	1	3,3	Positive		
(80) DiaMed	RV	>>>	1	3,3	Positive		
(159) Grifols	RV	>>>	3	10	Positive		
(172) Immucor	RV	>>>	7	23	Positive		
(173) Sanguin	RV	>>>	2	6,7	Positive		
(174) IVT Imuno	RV	>>>	1	3,3	Positive		
(203) ANTITOXIN	RV	>>>	2	6,7	Positive		
Samples E2 and S2			30			30	30 100
(14) Bio-Rad	RV	>>>	12	40	Negative		
(50) Merck	RV	>>>	1	3,3	Negative		
(64) Exbio Olomouc	RV	>>>	1	3,3	Negative		
(80) DiaMed	RV	>>>	1	3,3	Negative		
(159) Grifols	RV	>>>	3	10	Negative		
(172) Immucor	RV	>>>	7	23	Negative		
(173) Sanguin	RV	>>>	2	6,7	Negative		
(174) IVT Imuno	RV	>>>	1	3,3	Negative		
(203) ANTITOXIN	RV	>>>	2	6,7	Negative		
(734) Antigen Le^b			30			30	30 100
Samples E1 and S1			30			30	30 100
(14) Bio-Rad	RV	>>>	12	40	Negative		
(50) Merck	RV	>>>	1	3,3	Negative		
(64) Exbio Olomouc	RV	>>>	1	3,3	Negative		
(80) DiaMed	RV	>>>	1	3,3	Negative		
(159) Grifols	RV	>>>	3	10	Negative		
(172) Immucor	RV	>>>	7	23	Negative		
(173) Sanguin	RV	>>>	2	6,7	Negative		
(174) IVT Imuno	RV	>>>	1	3,3	Negative		
(203) ANTITOXIN	RV	>>>	2	6,7	Negative		

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Deadline: 2.6.2023

Setup: groups - manufacturer of kit

Test Sample Group	Frequency of the results					Success		
	AV	N _{tot}	N _{rel} [%]	Result	N _{eva}	N _{suc}	S _{rel} [%]	
Samples E2 and S2		30				30	30	100
(14) Bio-Rad	RV >>>	12	40	Positive				
(50) Merck	RV >>>	1	3,3	Positive				
(64) Exbio Olomouc	RV >>>	1	3,3	Positive				
(80) DiaMed	RV >>>	1	3,3	Positive				
(159) Grifols	RV >>>	3	10	Positive				
(172) Immucor	RV >>>	7	23	Positive				
(173) Sanguin	RV >>>	2	6,7	Positive				
(174) IVT Imuno	RV >>>	1	3,3	Positive				
(203) ANTITOXIN	RV >>>	2	6,7	Positive				
(731) Antigen Lu^a		24				24	24	100
Samples E1 and S1		24				24	24	100
(14) Bio-Rad	RV >>>	12	50	Negative				
(64) Exbio Olomouc	RV >>>	2	8,3	Negative				
(80) DiaMed	RV >>>	2	8,3	Negative				
(159) Grifols	RV >>>	4	17	Negative				
(172) Immucor	RV >>>	3	13	Negative				
(203) ANTITOXIN	RV >>>	1	4,2	Negative				
Samples E2 and S2		24				24	24	100
(14) Bio-Rad	RV >>>	12	50	Negative				
(64) Exbio Olomouc	RV >>>	2	8,3	Negative				
(80) DiaMed	RV >>>	2	8,3	Negative				
(159) Grifols	RV >>>	4	17	Negative				
(172) Immucor	RV >>>	3	13	Negative				
(203) ANTITOXIN	RV >>>	1	4,2	Negative				
(732) Antigen Lu^b		22				22	22	100
Samples E1 and S1		22				22	22	100
(14) Bio-Rad	RV >>>	10	45	Positive				
(64) Exbio Olomouc	RV >>>	1	4,5	Positive				
(80) DiaMed	RV >>>	3	14	Positive				
(159) Grifols	RV >>>	4	18	Positive				
(172) Immucor	RV >>>	2	9,1	Positive				
(203) ANTITOXIN	RV >>>	1	4,5	Positive				
(999) another manufacturer	RV >>>	1	4,5	Positive				
Samples E2 and S2		22				22	22	100
(14) Bio-Rad	RV >>>	10	45	Positive				
(64) Exbio Olomouc	RV >>>	1	4,5	Positive				
(80) DiaMed	RV >>>	3	14	Positive				
(159) Grifols	RV >>>	4	18	Positive				
(172) Immucor	RV >>>	2	9,1	Positive				
(203) ANTITOXIN	RV >>>	1	4,5	Positive				
(999) another manufacturer	RV >>>	1	4,5	Positive				
(726) Antigen P1		26				26	26	100
Samples E1 and S1		26				26	26	100
(14) Bio-Rad	RV >>>	8	31	Positive				
(64) Exbio Olomouc	RV >>>	2	7,7	Positive				
(80) DiaMed	RV >>>	1	3,8	Positive				
(159) Grifols	RV >>>	1	3,8	Positive				
(172) Immucor	RV >>>	6	23	Positive				
(173) Sanguin	RV >>>	5	19	Positive				
(174) IVT Imuno	RV >>>	1	3,8	Positive				
(203) ANTITOXIN	RV >>>	2	7,7	Positive				
Samples E2 and S2		26				26	26	100
(14) Bio-Rad	RV >>>	8	31	Positive				
(64) Exbio Olomouc	RV >>>	2	7,7	Positive				
(80) DiaMed	RV >>>	1	3,8	Positive				
(159) Grifols	RV >>>	1	3,8	Positive				
(172) Immucor	RV >>>	6	23	Positive				
(173) Sanguin	RV >>>	5	19	Positive				
(174) IVT Imuno	RV >>>	1	3,8	Positive				
(203) ANTITOXIN	RV >>>	2	7,7	Positive				
(740) Antigen Wr^a		8				8	8	100
Samples E1 and S1		8				8	8	100
(64) Exbio Olomouc	RV >>>	1	13	Negative				
(159) Grifols	RV >>>	2	25	Negative				
(172) Immucor	RV >>>	2	25	Negative				
(173) Sanguin	RV >>>	3	38	Negative				
Samples E2 and S2		8				8	8	100
(64) Exbio Olomouc	RV >>>	1	13	Negative				

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Setup: groups - manufacturer of kit

Test Sample Group	Frequency of the results					Success		
	AV	N _{tot}	N _{rel} [%]	Result	N _{eva}	N _{suc}	S _{rel} [%]	
(159) Grifols	RV >>>	2	25	Negative				
(172) Immucor	RV >>>	2	25	Negative				
(173) Sanguin	RV >>>	3	38	Negative				
(737) Direct Coombs (antiglobulin) test		122			122	122	100	
Samples E1 and S1		122			122	122	100	
(14) Bio-Rad	RV >>>	51	42	Negative				
(40) Ortho Clinical Diagnostics	RV >>>	1	0,8	Negative				
(64) Exbio Olomouc	RV >>>	2	1,6	Negative				
(80) DiaMed	RV >>>	23	19	Negative				
(159) Grifols	RV >>>	44	36	Negative				
(174) IVT Imuno	RV >>>	1	0,8	Negative				
Samples E2 and S2		122			122	122	100	
(14) Bio-Rad	RV >>>	51	42	Negative				
(40) Ortho Clinical Diagnostics	RV >>>	1	0,8	Negative				
(64) Exbio Olomouc	RV >>>	2	1,6	Negative				
(80) DiaMed	RV >>>	23	19	Negative				
(159) Grifols	RV >>>	44	36	Negative				
(174) IVT Imuno	RV >>>	1	0,8	Negative				
(741) Antibody screening (IAT, blood donor)		78			78	78	100	
Samples E1 and S1		78			78	78	100	
(6) APR	RV >>>	4	5,1	Positive				
(14) Bio-Rad	RV >>>	26	33	Positive				
(64) Exbio Olomouc	RV >>>	1	1,3	Positive				
(80) DiaMed	RV >>>	11	14	Positive				
(159) Grifols	RV >>>	23	29	Positive				
(172) Immucor	RV >>>	13	17	Positive				
Samples E2 and S2		78			78	78	100	
(6) APR	RV >>>	4	5,1	Positive				
(14) Bio-Rad	RV >>>	26	33	Positive				
(64) Exbio Olomouc	RV >>>	1	1,3	Positive				
(80) DiaMed	RV >>>	11	14	Positive				
(159) Grifols	RV >>>	23	29	Positive				
(172) Immucor	RV >>>	13	17	Positive				
(743) Antibody screening (IAT, recipient)		133			133	133	100	
Samples E1 and S1		133			133	133	100	
(6) APR	RV >>>	1	0,8	Positive				
(14) Bio-Rad	RV >>>	55	41	Positive				
(40) Ortho Clinical Diagnostics	RV >>>	1	0,8	Positive				
(80) DiaMed	RV >>>	23	17	Positive				
(159) Grifols	RV >>>	48	36	Positive				
(172) Immucor	RV >>>	5	3,8	Positive				
Samples E2 and S2		133			133	133	100	
(6) APR	RV >>>	1	0,8	Positive				
(14) Bio-Rad	RV >>>	55	41	Positive				
(40) Ortho Clinical Diagnostics	RV >>>	1	0,8	Positive				
(80) DiaMed	RV >>>	23	17	Positive				
(159) Grifols	RV >>>	48	36	Positive				
(172) Immucor	RV >>>	5	3,8	Positive				
(745) Antibody screening (IAT, pregnant)		107			107	107	100	
Samples E1 and S1		107			107	107	100	
(6) APR	RV >>>	1	0,9	Positive				
(14) Bio-Rad	RV >>>	44	41	Positive				
(40) Ortho Clinical Diagnostics	RV >>>	1	0,9	Positive				
(64) Exbio Olomouc	RV >>>	1	0,9	Positive				
(80) DiaMed	RV >>>	16	15	Positive				
(159) Grifols	RV >>>	40	37	Positive				
(172) Immucor	RV >>>	4	3,7	Positive				
Samples E2 and S2		107			107	107	100	
(6) APR	RV >>>	1	0,9	Positive				
(14) Bio-Rad	RV >>>	44	41	Positive				
(40) Ortho Clinical Diagnostics	RV >>>	1	0,9	Positive				
(64) Exbio Olomouc	RV >>>	1	0,9	Positive				
(80) DiaMed	RV >>>	16	15	Positive				
(159) Grifols	RV >>>	40	37	Positive				
(172) Immucor	RV >>>	4	3,7	Positive				
(747) Antibody screening (enzyme test)		103			103	102	99	
Samples E1 and S1		103			103	103	100	
(14) Bio-Rad		>	13	13	Negative			
	RV >>>	33	32	Positive				

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Setup: groups - manufacturer of kit

Test Sample Group	Frequency of the results				Success		
	AV	N _{tot}	N _{rel} [%]	Result	N _{eva}	N _{suc}	S _{rel} [%]
(40) Ortho Clinical Diagnostics	>	1	1	Negative			
(80) DiaMed	>	1	1	Negative			
	RV >>>	17	17	Positive			
(159) Grifols	RV >>>	37	36	Positive			
(172) Immucor	RV >>>	1	1	Positive			
Samples E2 and S2		103			103	102	99
(14) Bio-Rad		1	1	Negative			
	RV >>>	45	44	Positive			
(40) Ortho Clinical Diagnostics	RV >>>	1	1	Positive			
(80) DiaMed	RV >>>	18	17	Positive			
(159) Grifols	RV >>>	37	36	Positive			
(172) Immucor	RV >>>	1	1	Positive			
(750) Antibody identification		50			50	48	96
Samples E1 and S1		50			50	50	100
(0) not specified	RV >>>	50	100	anti-K			
Samples E2 and S2		50			50	48	96
(0) not specified		1	2	Not specified			
	RV >>>	48	96	anti-D; anti-M			
		1	2	anti-M; anti-C; anti-E			
(752) Antibody titre, Sample 1: 1st antibody		33			0		
Samples E1 and S1		33			0		
(0) not specified	±	3	9,1	titre 8			
	±	12	36	titre 16			
	±	15	45	titre 32			
	±	1	3	titre 64			
	±	2	6,1	titre 128			
(756) Antibody titre, Sample 2: 1st antibody		32			0		
Samples E2 and S2		32			0		
(0) not specified	±	1	3,1	titre 16			
	±	7	22	titre 32			
	±	10	31	titre 64			
	±	10	31	titre 128			
	±	2	6,3	titre 256			
	±	1	3,1	titre 512			
	±	1	3,1	titre 2000			
(757) Antibody titre, Sample 2: 2nd antibody		33			0		
Samples E2 and S2		33			0		
(0) not specified	±	2	6,1	titre 32			
	±	5	15	titre 64			
	±	9	27	titre 128			
	±	4	12	titre 256			
	±	8	24	titre 512			
	±	4	12	titre 1000			
	±	1	3	titre 4000			
Set 3							
(760) Crossmatch		120			120	120	100
Sample S1		120			120	120	100
All results	RV >>>	120	100	Crossmatch successful			
Sample S2		120			120	120	100
All results	RV >>>	120	100	Crossmatch successful			
(761) Crossmatch (segment K1)		120			120	120	100
Sample S1		120			120	120	100
(0) not specified	RV >>>	120	100	Positive test			
Sample S2		120			120	120	100
(0) not specified	RV >>>	120	100	Positive test			
(762) Serve transfusion product? (segment K1) (transfusion in non-emergency mode)		120			0		
Sample S1		120			0		
(0) not specified	±	119	99	Impossible, risk of haemolysis			
	±	1	0,8	Decision depends on results of other tests not performed in our laboratory			
Sample S2		120			0		
(0) not specified	±	119	99	Impossible, risk of haemolysis			
	±	1	0,8	Decision depends on results of other tests not performed in our laboratory			
(764) Crossmatch (segment K2)		120			120	120	100
Sample S1		120			120	120	100
(0) not specified	RV >>>	120	100	Negative test			

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Setup: groups - manufacturer of kit

Test Sample Group	Frequency of the results				Success		
	AV	N _{tot}	N _{rel} [%]	Result	N _{eva}	N _{suc}	S _{rel} [%]
Sample S2		120			120	120	100
(0) not specified	RV >>>	120	100	Positive test			
(765) Serve transfusion product? (segment K2) (transfusion in non-emergency mode)		120			0		
Sample S1		120			0		
(0) not specified	±	63	53	Decision depends on results of other tests not performed in our laboratory			
	±	21	18	Only if more suitable products are not available			
	±	36	30	Possible			
Sample S2		120			0		
(0) not specified	±	118	98	Impossible, risk of haemolysis			
	±	2	1,7	Decision depends on results of other tests not performed in our laboratory			