## LABQUALITY

**External Quality Assessment Scheme** 

# Mumps virus, antibodies Round 1, 2023

#### **Specimens**

Please find enclosed 3 human plasma or serum samples S001, S002 and S003, each 0.5 mL.

#### Caution

Quality control specimens derived from human blood must be handled with the same care as patient samples, i.e. as potential transmitters of serious diseases. The specimens are found to be HBsAg, HCVAb and HIVAgAb negative when tested with licensed reagents, but no known test method can offer complete assurance that the specimens will not transmit these or other infectious diseases.

#### **Examinations**

Mumps virus IgG Mumps virus IgM Clinical interpretation

#### Storage and use

After arrival, the samples should be stored at +2...8 °C, and used as soon as possible, preferably within a week. The samples are ready for use. Analyse as patient samples.

#### Result reporting

Please enter the results and methods via LabScala (www.labscala.com). If you cannot find your instrument or reagent from the registry, please contact the EQA Coordinator. All reported examinations will be scored.

S001



S002



S003



#### 2023-01-23

#### **INSTRUCTIONS**

Product no. 5669 LQ774323011-013/FI

Subcontracting: Sample pretesting

If the kit is incomplete or contains damaged specimens, please report immediately to info@labquality.fi.

The results should be reported no later than **February 16, 2023**.

The expected results of the round are published in LabScala in the View Reports section by February 20, 2023.

#### Inquiries

EQA Coordinator Mira Saarinen mira.h.saarinen@labquality.fi

#### **Labquality Oy**

Kumpulantie 15 FI-00520 HELSINKI Finland

Tel. + 358 9 8566 8200 Fax + 358 9 8566 8280

info@labquality.fi www.labquality.com



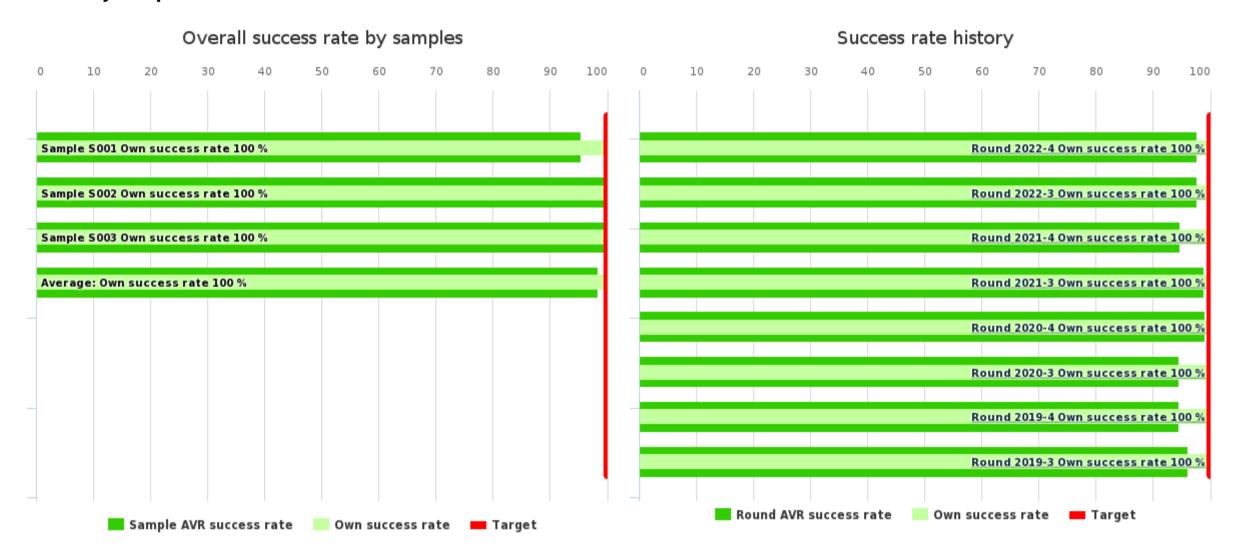




## **Client report**

	No of participants	No of responded participants	Response percentage
Mumps virus, antibodies, January, 1-2023	36	34	94.4 %

## Summary Sample-set 1 Result 1



Summary	Own score	Max score	Own success rate	Difference	AVR success rate
Sample S001	8	8	100 %	4.5 %	95.5 %
Sample S002	8	8	100 %	0 %	100 %
Sample S003	8	8	100 %	0 %	100 %
Average:			100 %	1.5 %	98.5 %

History	Test nr.	Own success rate	Difference	AVR success rate
Round 2022-4	1-1	100 %	2.2 %	97.8 %
Round 2022-3	1-1	100 %	2.3 %	97.7 %
Round 2021-4	1-1	100 %	5.2 %	94.8 %
Round 2021-3	1-1	100 %	1.1 %	98.9 %
Round 2020-4	1-1	100 %	0.9 %	99.1 %
Round 2020-3	1-1	100 %	5.5 %	94.5 %
Round 2019-4	1-1	100 %	5.5 %	94.5 %
Round 2019-3	1-1	100 %	3.9 %	96.1 %

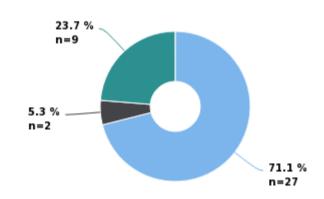


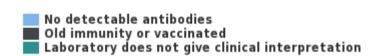
## Sample S001 Sample-set 1 Result 1



Sample S001 results	Responded	Own score	Max score	Own success rate	Difference	AVR success rate	Count
	Clinical interpretation	4	4	100 %	6.9 %	93.1 %	38
	Mumps virus IgG	2	2	100 %	5.3 %	94.7 %	38
	Mumps virus IgM	2	2	100 %	0 %	100 %	37
Total:		8	8	100 %	4.5 %	95.5 %	113

## Sample S001 Clinical interpretation

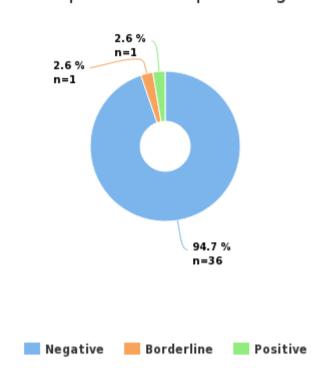




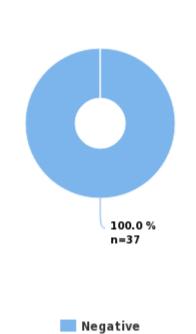
Clinical interpretation	Interpretation	Further action	Interpretation count	Further action count	Own score	Max score	Own success rate	Difference	AVR success rate
	<ul><li>No detectable antibodies</li></ul>		27		4	4	100 %	0 %	100 %
	Old immunity or vaccinated		2		-				0 %
	Laboratory does not give clinical interpretation		9		-				-
	Total:		38		4	4	100 %	6.9 %	93.1 %

# LABQUALITY

## Sample S001 Mumps virus IgG



## Sample S001 Mumps virus IgM



#### **OWN DEVICE: LIASXL**

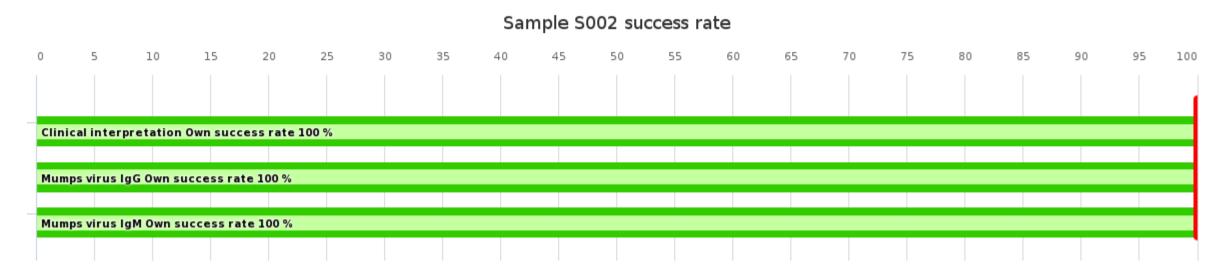
Mumps virus IgG	Interpretation	Method	Interpretation count	Method count	Own score	Max score	Own success rate	Difference	AVR success rate
	<ul><li>Negative</li></ul>		36		2	2	100 %	0 %	100 %
		bioMerieux VIDAS Mumps IgG		1					
		<ul><li>DiaSorin LIAISON Mumps IgG</li></ul>		18					
		Diesse Chorus Mumps IgG		1					
		Euroimmun Anti-Mumps Virus IgG ELISA		6					
		In-house EIA		2					
		NovaTec NovaLisa Mumps Virus IgG ELISA		1					
		TestLine Clinical Diagnostics EIA Mumps IgG		2					
		Vircell Mumps VirClia IgG		2					
		Virion/Serion ELISA classic Mumps IgG		3					
	Borderline		1		-				0 %
		Euroimmun Anti-Mumps Virus IgG ELISA		1					
	Positive		1		-				0 %
		In-house EIA		1					
	Total:		38		2	2	100 %	5.3 %	94.7 %

## **OWN DEVICE: LIASXL**

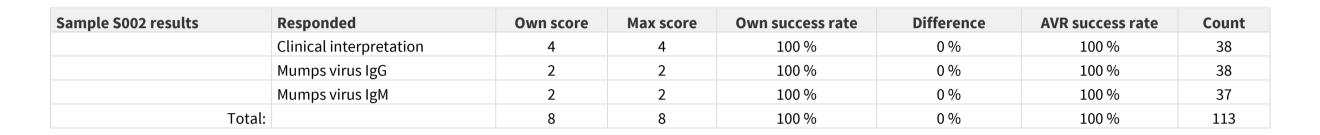
Mumps virus IgM	Interpretation	Method	Interpretation count	Method count	Own score	Max score	Own success rate	Difference	AVR success rate
	<ul><li>Negative</li></ul>		37		2	2	100 %	0 %	100 %
		DiaSorin LIAISON Mumps IgM		18					
		Diesse Chorus Mumps IgM		1					
		Euroimmun Anti-Mumps Virus IgM ELISA		6					
		In-house EIA		3					
		Microimmune Mumps IgM Capture EIA		1					
		NovaTec NovaLisa Mumps Virus IgM ELISA		1					
		TestLine Clinical Diagnostics EIA Mumps IgM		2					
		Vircell Mumps VirClia IgM		2					
		Virion/Serion ELISA classic Mumps IgM		3					
	Total:		37		2	2	100 %	0 %	100 %



## Sample S002 Sample-set 1 Result 1

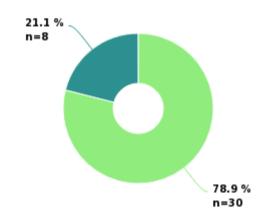


Sample AVR success rate



Own success rate

## Sample S002 Clinical interpretation



Acute/recent infection
 Laboratory does not give clinical interpretation

Clinical interpretation	Interpretation	Further action	Interpretation count	Further action count	Own score	Max score	Own success rate	Difference	AVR success rate
	<ul><li>Acute/recent infection</li></ul>		30		4	4	100 %	0 %	100 %
		New sample requested and referred to confirmation		3	-	-			
		Referred to confirmation		1	-	_			
	Laboratory does not give clinical interpretation		8		-				-
	Total:		38		4	4	100 %	0 %	100 %

Sample S002 Mumps virus IgM

Positive



## Sample S002 Mumps virus IgG

Positive



#### **OWN DEVICE: LIASXL**

Mumps virus IgG	Interpretation	Method	Interpretation count	Method count	Own score	Max score	Own success rate	Difference	AVR success rate
	<ul><li>Positive</li></ul>		38		2	2	100 %	0 %	100 %
		bioMerieux VIDAS Mumps IgG		1					
		<ul><li>DiaSorin LIAISON Mumps IgG</li></ul>		18					
		Diesse Chorus Mumps IgG		1					
		Euroimmun Anti-Mumps Virus IgG ELISA		7					
		In-house EIA		3					
		NovaTec NovaLisa Mumps Virus IgG ELISA		1					
		TestLine Clinical Diagnostics EIA Mumps IgG		2					
		Vircell Mumps VirClia IgG		2					
		Virion/Serion ELISA classic Mumps IgG		3					
	Total:		38		2	2	100 %	0 %	100 %

#### **OWN DEVICE: LIASXL**

Mumps virus IgM	Interpretation	Method	Interpretation count	Method count	Own score	Max score	Own success rate	Difference	AVR success rate
	<ul><li>Positive</li></ul>		37		2	2	100 %	0 %	100 %
		• DiaSorin LIAISON Mumps IgM		18					
		Diesse Chorus Mumps IgM		1					
		Euroimmun Anti-Mumps Virus IgM ELISA		6					
		In-house EIA		3					
		Microimmune Mumps IgM Capture EIA		1					
		NovaTec NovaLisa Mumps Virus IgM ELISA		1					
		TestLine Clinical Diagnostics EIA Mumps IgM		2					
		Vircell Mumps VirClia IgM		2					
		Virion/Serion ELISA classic Mumps IgM		3					
	Total:		37		2	2	100 %	0 %	100 %

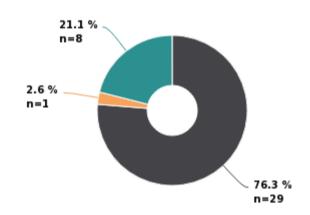


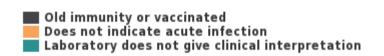
## Sample S003 Sample-set 1 Result 1



Sample S003 results	Responded	Own score	Max score	Own success rate	Difference	AVR success rate	Count
	Clinical interpretation	4	4	100 %	0 %	100 %	38
	Mumps virus IgG	2	2	100 %	0 %	100 %	38
	Mumps virus IgM	2	2	100 %	0 %	100 %	37
Total:		8	8	100 %	0 %	100 %	113

## Sample S003 Clinical interpretation





Clinical interpretation	Interpretation	Further action	Interpretation count	Further action count	Own score	Max score	Own success rate	Difference	AVR success rate
	<ul><li>Old immunity or vaccinated</li></ul>		29		4	4	100 %	0 %	100 %
	Does not indicate acute infection		1		-				100 %
	Laboratory does not give clinical interpretation		8		-				-
	Total:		38		4	4	100 %	0 %	100 %

Sample S003 Mumps virus IgM

Negative



## Sample S003 Mumps virus IgG

Positive



#### **OWN DEVICE: LIASXL**

Mumps virus IgG	Interpretation	Method	Interpretation count	Method count	Own score	Max score	Own success rate	Difference	AVR success rate
	<ul><li>Positive</li></ul>		38		2	2	100 %	0 %	100 %
		bioMerieux VIDAS Mumps IgG		1					
		<ul><li>DiaSorin LIAISON Mumps IgG</li></ul>		18					
		Diesse Chorus Mumps IgG		1					
		Euroimmun Anti-Mumps Virus IgG ELISA		7					
		In-house EIA		3					
		NovaTec NovaLisa Mumps Virus IgG ELISA		1					
		TestLine Clinical Diagnostics EIA Mumps IgG		2					
		Vircell Mumps VirClia IgG		2					
		Virion/Serion ELISA classic Mumps IgG		3					
	Total:		38		2	2	100 %	0 %	100 %

#### **OWN DEVICE: LIASXL**

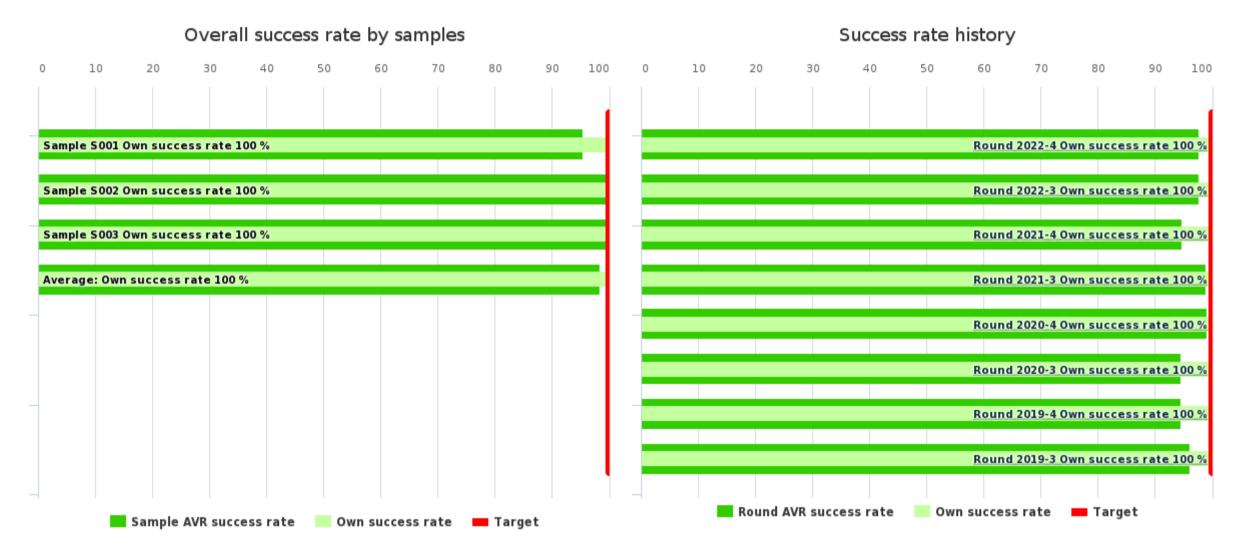
Mumps virus IgM	Interpretation	Method	Interpretation count	Method count	Own score	Max score	Own success rate	Difference	AVR success rate
	<ul><li>Negative</li></ul>		37		2	2	100 %	0 %	100 %
		• DiaSorin LIAISON Mumps IgM		18					
		Diesse Chorus Mumps IgM		1					
		Euroimmun Anti-Mumps Virus IgM ELISA		6					
		In-house EIA		3					
		Microimmune Mumps IgM Capture EIA		1					
		NovaTec NovaLisa Mumps Virus IgM ELISA		1					
		TestLine Clinical Diagnostics EIA Mumps IgM		2					
		Vircell Mumps VirClia IgM		2					
		Virion/Serion ELISA classic Mumps IgM		3					
	Total:		37		2	2	100 %	0 %	100 %



## **Client report**

	No of participants	No of responded participants	Response percentage
Mumps virus, antibodies, January, 1-2023	36	34	94.4 %

## Summary Sample-set 2 Result 1



Summary	Own score	Max score	Own success rate	Difference	AVR success rate
Sample S001	8	8	100 %	4.5 %	95.5 %
Sample S002	8	8	100 %	0 %	100 %
Sample S003	8	8	100 %	0 %	100 %
Average:			100 %	1.5 %	98.5 %

History	Test nr.	Own success rate	Difference	AVR success rate
Round 2022-4	1-1	100 %	2.2 %	97.8 %
Round 2022-3	1-1	100 %	2.3 %	97.7 %
Round 2021-4	1-1	100 %	5.2 %	94.8 %
Round 2021-3	1-1	100 %	1.1 %	98.9 %
Round 2020-4	1-1	100 %	0.9 %	99.1 %
Round 2020-3	1-1	100 %	5.5 %	94.5 %
Round 2019-4	1-1	100 %	5.5 %	94.5 %
Round 2019-3	1-1	100 %	3.9 %	96.1 %

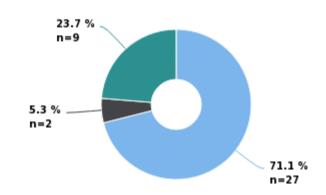


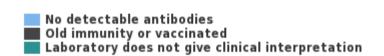
## Sample S001 Sample-set 2 Result 1



Sample S001 results	Responded	Own score	Max score	Own success rate	Difference	AVR success rate	Count
	Clinical interpretation	4	4	100 %	6.9 %	93.1 %	38
	Mumps virus IgG	2	2	100 %	5.3 %	94.7 %	38
	Mumps virus IgM	2	2	100 %	0 %	100 %	37
Tota	:	8	8	100 %	4.5 %	95.5 %	113

## Sample S001 Clinical interpretation

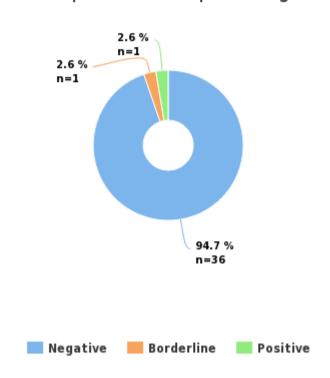




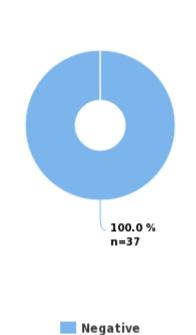
Clinical interpretation	Interpretation	Further action	Interpretation count	Further action count	Own score	Max score	Own success rate	Difference	AVR success rate
	<ul><li>No detectable antibodies</li></ul>		27		4	4	100 %	0 %	100 %
	Old immunity or vaccinated		2		-				0 %
	Laboratory does not give clinical interpretation		9		-				-
	Total:		38		4	4	100 %	6.9 %	93.1 %

# LABQUALITY

## Sample S001 Mumps virus IgG



## Sample S001 Mumps virus IgM



#### **OWN DEVICE: LIASXL**

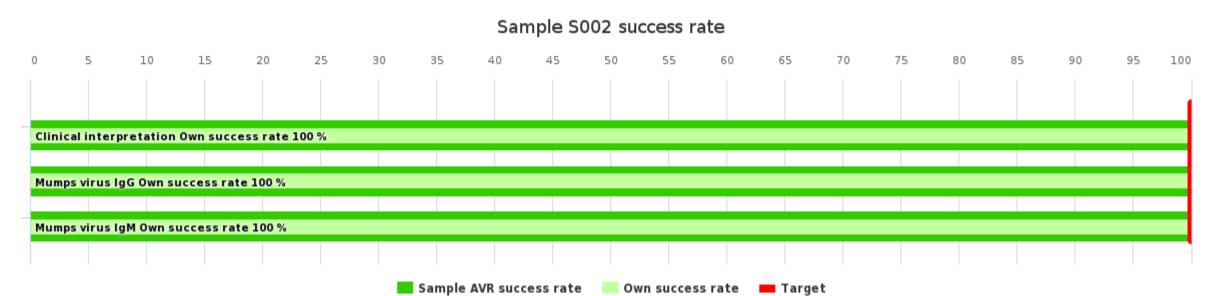
Mumps virus IgG	Interpretation	Method	Interpretation count	Method count	Own score	Max score	Own success rate	Difference	AVR success rate
	<ul><li>Negative</li></ul>		36		2	2	100 %	0 %	100 %
		bioMerieux VIDAS Mumps IgG		1					
		<ul><li>DiaSorin LIAISON Mumps IgG</li></ul>		18					
		Diesse Chorus Mumps IgG		1					
		Euroimmun Anti-Mumps Virus IgG ELISA		6					
		In-house EIA		2					
		NovaTec NovaLisa Mumps Virus IgG ELISA		1					
		TestLine Clinical Diagnostics EIA Mumps IgG		2					
		Vircell Mumps VirClia IgG		2					
		Virion/Serion ELISA classic Mumps IgG		3					
	Borderline		1		-				0 %
		Euroimmun Anti-Mumps Virus IgG ELISA		1					
	Positive		1		-				0 %
		In-house EIA		1					
	Total:		38		2	2	100 %	5.3 %	94.7 %

## **OWN DEVICE: LIASXL**

Mumps virus IgM	Interpretation	Method	Interpretation count	Method count	Own score	Max score	Own success rate	Difference	AVR success rate
	<ul><li>Negative</li></ul>		37		2	2	100 %	0 %	100 %
		DiaSorin LIAISON Mumps IgM		18					
		Diesse Chorus Mumps IgM		1					
		Euroimmun Anti-Mumps Virus IgM ELISA		6					
		In-house EIA		3					
		Microimmune Mumps IgM Capture EIA		1					
		NovaTec NovaLisa Mumps Virus IgM ELISA		1					
		TestLine Clinical Diagnostics EIA Mumps IgM		2					
		Vircell Mumps VirClia IgM		2					
		Virion/Serion ELISA classic Mumps IgM		3					
	Total:		37		2	2	100 %	0 %	100 %

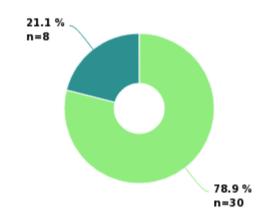


## Sample S002 Sample-set 2 Result 1



Sample S002 results	Responded	Own score	Max score	Own success rate	Difference	AVR success rate	Count
	Clinical interpretation	4	4	100 %	0 %	100 %	38
	Mumps virus IgG	2	2	100 %	0 %	100 %	38
	Mumps virus IgM	2	2	100 %	0 %	100 %	37
Total:		8	8	100 %	0 %	100 %	113

## Sample S002 Clinical interpretation



Acute/recent infection
Laboratory does not give clinical interpretation

Clinical interpretation	Interpretation	Further action	Interpretation count	Further action count	Own score	Max score	Own success rate	Difference	AVR success rate
	<ul><li>Acute/recent infection</li></ul>		30		4	4	100 %	0 %	100 %
		New sample requested and referred to confirmation		3	-	-			
		Referred to confirmation		1	-	-			
	Laboratory does not give clinical interpretation		8		-				-
	Total:		38		4	4	100 %	0 %	100 %

Sample S002 Mumps virus IgM



## Sample S002 Mumps virus IgG



#### **OWN DEVICE: LIASXL**

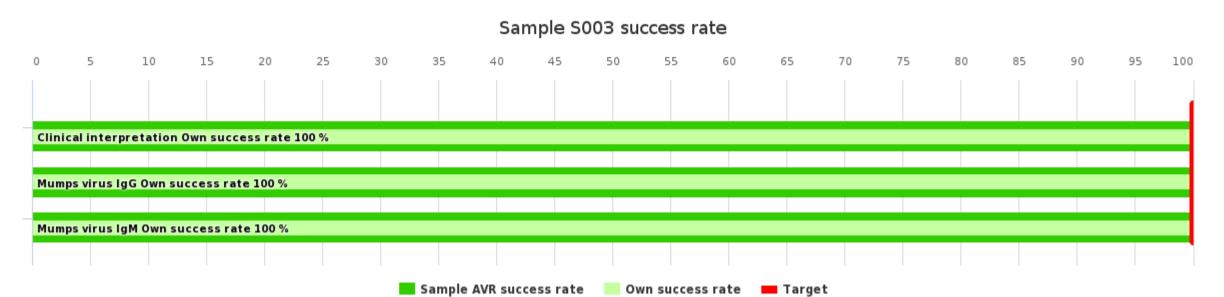
Mumps virus IgG	Interpretation	Method	Interpretation count	Method count	Own score	Max score	Own success rate	Difference	AVR success rate
	<ul><li>Positive</li></ul>		38		2	2	100 %	0 %	100 %
		bioMerieux VIDAS Mumps IgG		1					
		<ul><li>DiaSorin LIAISON Mumps IgG</li></ul>		18					
		Diesse Chorus Mumps IgG		1					
		Euroimmun Anti-Mumps Virus IgG ELISA		7					
		In-house EIA		3					
		NovaTec NovaLisa Mumps Virus IgG ELISA		1					
		TestLine Clinical Diagnostics EIA Mumps IgG		2					
		Vircell Mumps VirClia IgG		2					
		Virion/Serion ELISA classic Mumps IgG		3					
	Total:		38		2	2	100 %	0 %	100 %

#### **OWN DEVICE: LIASXL**

Mumps virus IgM	Interpretation	Method	Interpretation count	Method count	Own score	Max score	Own success rate	Difference	AVR success rate
	<ul><li>Positive</li></ul>		37		2	2	100 %	0 %	100 %
		<ul><li>DiaSorin LIAISON Mumps IgM</li></ul>		18					
		Diesse Chorus Mumps IgM		1					
		Euroimmun Anti-Mumps Virus IgM ELISA		6					
		In-house EIA		3					
		Microimmune Mumps IgM Capture EIA		1					
		NovaTec NovaLisa Mumps Virus IgM ELISA		1					
		TestLine Clinical Diagnostics EIA Mumps IgM		2					
		Vircell Mumps VirClia IgM		2					
		Virion/Serion ELISA classic Mumps IgM		3					
	Total:		37		2	2	100 %	0 %	100 %

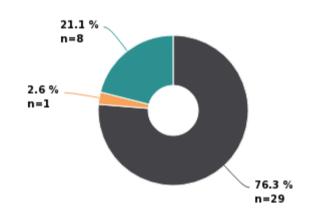


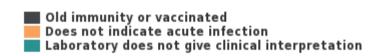
## Sample S003 Sample-set 2 Result 1



Sample S003 results	Responded	Own score	Max score	Own success rate	Difference	AVR success rate	Count
	Clinical interpretation	4	4	100 %	0 %	100 %	38
	Mumps virus IgG	2	2	100 %	0 %	100 %	38
	Mumps virus IgM	2	2	100 %	0 %	100 %	37
Total:		8	8	100 %	0 %	100 %	113

## Sample S003 Clinical interpretation





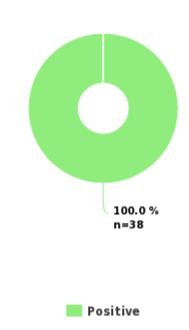
Clinical interpretation	Interpretation	Further action	Interpretation count	Further action count	Own score	Max score	Own success rate	Difference	AVR success rate
	<ul><li>Old immunity or vaccinated</li></ul>		29		4	4	100 %	0 %	100 %
	Does not indicate acute infection		1		-				100 %
	Laboratory does not give clinical interpretation		8		-				-
	Total:		38		4	4	100 %	0 %	100 %

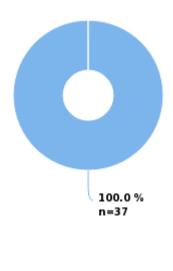
13/15



## Sample S003 Mumps virus IgG

# Sample S003 Mumps virus IgM





Negative

#### **OWN DEVICE: LIASXL**

Mumps virus IgG	Interpretation	Method	Interpretation count	Method count	Own score	Max score	Own success rate	Difference	AVR success rate
	<ul><li>Positive</li></ul>		38		2	2	100 %	0 %	100 %
		bioMerieux VIDAS Mumps IgG		1					
		<ul><li>DiaSorin LIAISON Mumps IgG</li></ul>		18					
		Diesse Chorus Mumps IgG		1					
		Euroimmun Anti-Mumps Virus IgG ELISA		7					
		In-house EIA		3					
		NovaTec NovaLisa Mumps Virus IgG ELISA		1					
		TestLine Clinical Diagnostics EIA Mumps IgG		2					
		Vircell Mumps VirClia IgG		2					
		Virion/Serion ELISA classic Mumps IgG		3					
	Total:		38		2	2	100 %	0 %	100 %

#### **OWN DEVICE: LIASXL**

Mumps virus IgM	Interpretation	Method	Interpretation count	Method count	Own score	Max score	Own success rate	Difference	AVR success rate
	<ul><li>Negative</li></ul>		37		2	2	100 %	0 %	100 %
		<ul><li>DiaSorin LIAISON Mumps IgM</li></ul>		18					
		Diesse Chorus Mumps IgM		1					
		Euroimmun Anti-Mumps Virus IgM ELISA		6					
		In-house EIA		3					
		Microimmune Mumps IgM Capture EIA		1					
		NovaTec NovaLisa Mumps Virus IgM ELISA		1					
		TestLine Clinical Diagnostics EIA Mumps IgM		2					
		Vircell Mumps VirClia IgM		2					
		Virion/Serion ELISA classic Mumps IgM		3					
	Total:		37		2	2	100 %	0 %	100 %







#### **Report Info**

#### **PARTICIPANTS**

Altogether 36 laboratories from 18 countries participated in this EQA round.

#### **REPORT INFO**

The results are divided into groups according to the method stated by the laboratory and presented in laboratory-specific tables. Accepted results are marked with green color and laboratory's own result with a black radio button . In the scoring report you will find summaries of overall success rate and sample specific success rates (%). Sample specific interpretations are shown in pie diagrams as percentages and the total interpretation and methodic counts in the tables. If you have not reported any results you will get a note: "You have not responded in time, only global report is available."

For information on report interpretation and performance evaluation, please see the "EQAS Interpretation guidelines" in LabScala User instructions. In case you have any questions regarding the reports, please contact the EQA Coordinator.

#### **SCORING**

The round is scored based on test results and clinical interpretations when 60% or more of the participants report the expected result and when at least three results are reported.

The following general rules are applied:

Correct/expected test result 2/2 points
False/deviating test result 0/2 points
Correct/expected clinical interpretation 4/4 points
False/deviating clinical interpretation 0/4 points

The performance of the laboratory is assessed by the Own success rate (%). The target is 100%. The examination-specific scores obtained by the laboratory in the round are converted to Own success rate per sample (scores/maximum scores\*100). The Laboratory's Own success rate is the average of the sample success rates.

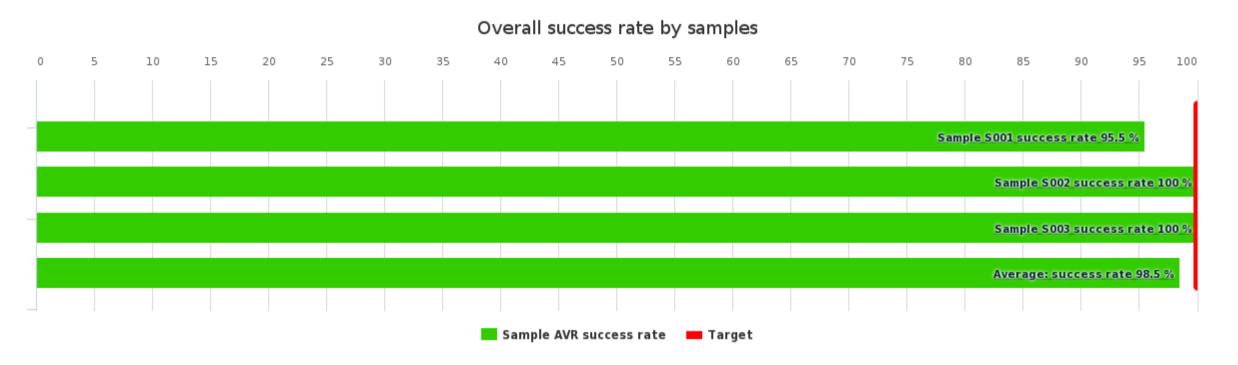
The success rate for the entire round (AVR success rate) is calculated from the total number of scores given to the results per sample (all scores/maximum scores\*100). The AVG success rate of the entire round is the average of the sample success rates. The difference in the Laboratory's Own success rate (%) to the corresponding numbers for the entire round is shown in the table.



## **GLOBAL REPORT**

	No of participants	No of responded participants	Response percentage
Mumps virus, antibodies, January, 1-2023	36	34	94.4 %

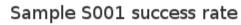
## Summary

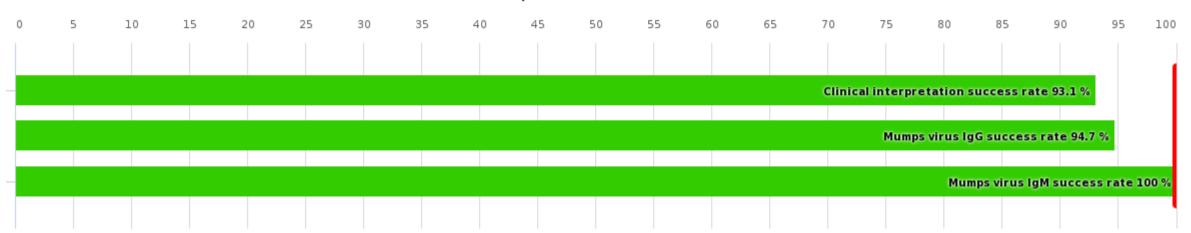


Summary	AVR success rate
Sample S001	95.5 %
Sample S002	100 %
Sample S003	100 %
Average:	98.5 %



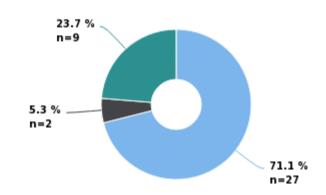
## Sample S001

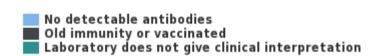




Sample S001 results	Responded	AVR success rate	Count
	Clinical interpretation	93.1 %	38
	Mumps virus IgG	94.7 %	38
	Mumps virus IgM	100 %	37
Total:		95.5 %	113

## Sample S001 Clinical interpretation



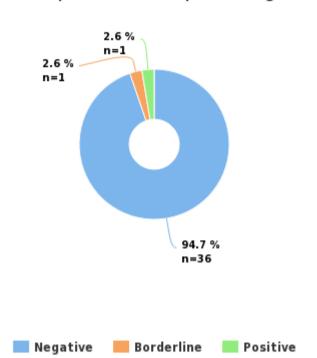


Clinical interpretation	Interpretation	Further action	Interpretation count	Further action count	AVR success rate	Interpretation Score	Further action Score
	No detectable antibodies		27		100 %	4	
	Old immunity or vaccinated		2		0 %	0	
	Laboratory does not give clinical interpretation		9		-	-	
	Total:		38		93.1 %		

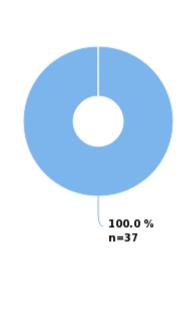


## Mumps virus, antibodies, January, 1-2023

## Sample S001 Mumps virus IgG



## Sample S001 Mumps virus IgM



Negative

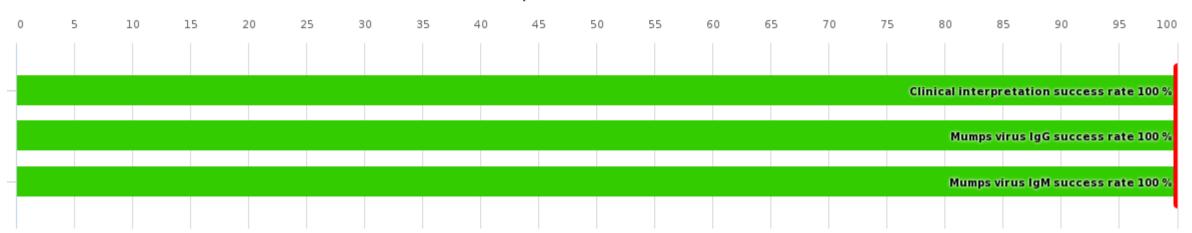
Mumps virus IgG	Interpretation	Method	Interpretation count	Method count	AVR success rate	Interpretation Score
	Negative		36		100 %	2
		bioMerieux VIDAS Mumps IgG		1		
		DiaSorin LIAISON Mumps IgG		18		
		Diesse Chorus Mumps IgG		1		
		Euroimmun Anti-Mumps Virus IgG ELISA		6		
		In-house EIA		2		
		NovaTec NovaLisa Mumps Virus IgG ELISA		1		
		TestLine Clinical Diagnostics EIA Mumps IgG		2		
		Vircell Mumps VirClia IgG		2		
		Virion/Serion ELISA classic Mumps IgG		3		
	Borderline		1		0 %	0
		Euroimmun Anti-Mumps Virus IgG ELISA		1		
	Positive		1		0 %	0
		In-house EIA		1		
	Total:		38		94.7 %	

Mumps virus IgM	Interpretation	Method	Interpretation count	Method count	AVR success rate	Interpretation Score
	Negative		37		100 %	2
		DiaSorin LIAISON Mumps IgM		18		
		Diesse Chorus Mumps IgM		1		
		Euroimmun Anti-Mumps Virus IgM ELISA		6		
		In-house EIA		3		
		Microimmune Mumps IgM Capture EIA		1		
		NovaTec NovaLisa Mumps Virus IgM ELISA		1		
		TestLine Clinical Diagnostics EIA Mumps IgM		2		
		Vircell Mumps VirClia IgM		2		
		Virion/Serion ELISA classic Mumps IgM		3		
	Total:		37		100 %	



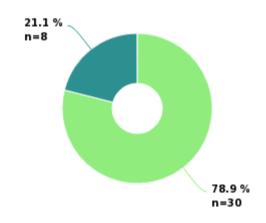
## Sample S002

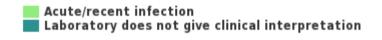




Sample S002 results	Responded	AVR success rate	Count
	Clinical interpretation	100 %	38
	Mumps virus IgG	100 %	38
	Mumps virus IgM	100 %	37
Total:		100 %	113

## Sample S002 Clinical interpretation





Clinical interpretation	Interpretation	Further action	Interpretation count	Further action count	AVR success rate	Interpretation Score	Further action Score
	Acute/recent infection		30		100 %	4	
		New sample requested and referred to confirmation		3	-		-
		Referred to confirmation		1	-		-
	Laboratory does not give clinical interpretation		8		-	-	
	Total:		38		100 %		



## Mumps virus, antibodies, January, 1-2023

## Sample S002 Mumps virus IgG

## Sample S002 Mumps virus IgM



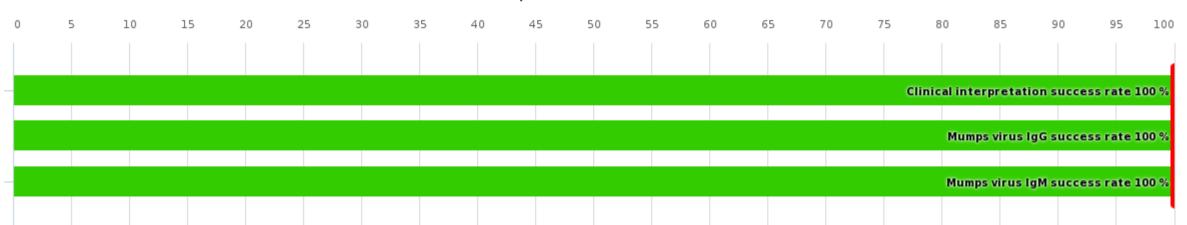
Mumps virus IgG	Interpretation	Method	Interpretation count	Method count	AVR success rate	Interpretation Score
	Positive		38		100 %	2
		bioMerieux VIDAS Mumps IgG		1		
		DiaSorin LIAISON Mumps IgG		18		
		Diesse Chorus Mumps IgG		1		
		Euroimmun Anti-Mumps Virus IgG ELISA		7		
		In-house EIA		3		
		NovaTec NovaLisa Mumps Virus IgG ELISA		1		
		TestLine Clinical Diagnostics EIA Mumps IgG		2		
		Vircell Mumps VirClia IgG		2		
		Virion/Serion ELISA classic Mumps IgG		3		
	Total:		38		100 %	

Mumps virus IgM	Interpretation	Method	Interpretation count	Method count	AVR success rate	Interpretation Score
	Positive		37		100 %	2
		DiaSorin LIAISON Mumps IgM		18		
		Diesse Chorus Mumps IgM		1		
		Euroimmun Anti-Mumps Virus IgM ELISA		6		
		In-house EIA		3		
		Microimmune Mumps IgM Capture EIA		1		
		NovaTec NovaLisa Mumps Virus IgM ELISA		1		
		TestLine Clinical Diagnostics EIA Mumps IgM		2		
		Vircell Mumps VirClia IgM		2		
		Virion/Serion ELISA classic Mumps IgM		3		
	Total:		37		100 %	



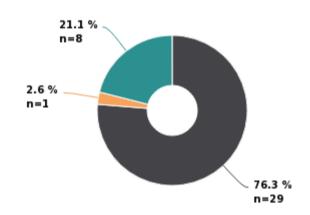
## Sample S003

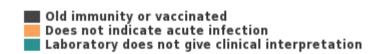




Sample S003 results	Responded	AVR success rate	Count
	Clinical interpretation	100 %	38
	Mumps virus IgG	100 %	38
	Mumps virus IgM	100 %	37
Total:		100 %	113

## Sample S003 Clinical interpretation





Clinical interpretation	Interpretation	Further action	Interpretation count	Further action count	AVR success rate	Interpretation Score	Further action Score
	Old immunity or vaccinated		29		100 %	4	
	Does not indicate acute infection		1		100 %	4	
	Laboratory does not give clinical interpretation		8		-	-	
	Total:		38		100 %		



## Mumps virus, antibodies, January, 1-2023

## Sample S003 Mumps virus IgG

## Sample S003 Mumps virus IgM



Mumps virus IgG	Interpretation	Method	Interpretation count	Method count	AVR success rate	Interpretation Score
	Positive		38		100 %	2
		bioMerieux VIDAS Mumps IgG		1		
		DiaSorin LIAISON Mumps IgG		18		
		Diesse Chorus Mumps IgG		1		
		Euroimmun Anti-Mumps Virus IgG ELISA		7		
		In-house EIA		3		
		NovaTec NovaLisa Mumps Virus IgG ELISA		1		
		TestLine Clinical Diagnostics EIA Mumps IgG		2		
		Vircell Mumps VirClia IgG		2		
		Virion/Serion ELISA classic Mumps IgG		3		
	Total:		38		100 %	

Mumps virus IgM	Interpretation	Method	Interpretation count	Method count	AVR success rate	Interpretation Score
	Negative		37		100 %	2
		DiaSorin LIAISON Mumps IgM		18		
		Diesse Chorus Mumps IgM		1		
		Euroimmun Anti-Mumps Virus IgM ELISA		6		
		In-house EIA		3		
		Microimmune Mumps IgM Capture EIA		1		
		NovaTec NovaLisa Mumps Virus IgM ELISA		1		
		TestLine Clinical Diagnostics EIA Mumps IgM		2		
		Vircell Mumps VirClia IgM		2		
		Virion/Serion ELISA classic Mumps IgM		3		
	Total:		37		100 %	



## Mumps virus, antibodies, January, 1-2023

#### **Report Info**

#### **PARTICIPANTS**

Altogether 36 laboratories from 18 countries participated in this EQA round.

#### **REPORT INFO**

The results are divided into groups according to the method stated by the laboratory and presented in laboratory-specific tables. Accepted results are marked with green color and laboratory's own result with a black radio button . In the scoring report you will find summaries of overall success rate and sample specific success rates (%). Sample specific interpretations are shown in pie diagrams as percentages and the total interpretation and methodic counts in the tables. If you have not reported any results you will get a note: "You have not responded in time, only global report is available."

For information on report interpretation and performance evaluation, please see the "EQAS Interpretation guidelines" in LabScala User instructions. In case you have any questions regarding the reports, please contact the EQA Coordinator.

#### **SCORING**

The round is scored based on test results and clinical interpretations when 60% or more of the participants report the expected result and when at least three results are reported.

The following general rules are applied:

Correct/expected test result 2/2 points
False/deviating test result 0/2 points
Correct/expected clinical interpretation 4/4 points
False/deviating clinical interpretation 0/4 points

The performance of the laboratory is assessed by the Own success rate (%). The target is 100%. The examination-specific scores obtained by the laboratory in the round are converted to Own success rate per sample (scores/maximum scores\*100). The Laboratory's Own success rate is the average of the sample success rates.

The success rate for the entire round (AVR success rate) is calculated from the total number of scores given to the results per sample (all scores/maximum scores\*100). The AVG success rate of the entire round is the average of the sample success rates. The difference in the Laboratory's Own success rate (%) to the corresponding numbers for the entire round is shown in the table.

## LABQUALITY

**External Quality Assessment Scheme** 

## Mumps virus, antibodies Round 1, 2023

#### **Specimens**

Samples of this EQA round were human plasma or serum, each of which originated from a single donor. Based on the pre-testing and the results obtained in the round, the samples were homogeneous, stable and suitable for the external quality assessment scheme. The materials were sent without temperature control packaging.

The expected results were as follows:

Sample S001 (LQ774323011)
Mumps IgG Negative
Mumps IgM Negative

Clinical interpretation No detectable antibodies

Sample S002 (LQ774323012)
Mumps IgG Positive
Mumps IgM Positive

Sample S003 (LQ774323013)
Mumps IgG Positive
Mumps IgM Negative

Clinical interpretation Old immunity/vaccinated

Pre-test methods: Euroimmun Anti-Mumps Virus IgG/IgM ELISA and Microimmune Mumps IgM Capture EIA.

#### Report info

Please see the description of the data analysis on the last page of the laboratory-specific reports and global reports. It is important to read the Final report first, because it contains important information of the samples and results in each round.

#### Comments - Expert

Sample S001 was IgG and IgM antibody negative. The sample was previously on round 4, 2021 (S003). Two deviating IgG antibody results were reported resulting in two deviating clinical interpretations. On the previous round for the same sample one deviating IgG result was reported but with a different test. All reported IgM antibody results were correct/as expected.

Sample S002 was IgG and IgM antibody positive. The sample was previously on round 3, 2022 (S003). All reported IgG and IgM antibody results as well as clinical interpretations were correct/as expected.

Sample S003 was IgG antibody positive and IgM antibody negative. The sample was previously on round 2, 2021 (S003). All reported IgG and IgM antibody results as well as clinical interpretations were correct/as expected.

#### **Exceptions in scoring**

No exceptions.

#### End of report

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#### 2023-03-06

#### FINAL REPORT

Product no. 5669

Subcontracting: Sample pretesting

 Samples sent
 2023-01-23

 Round closed
 2023-02-16

 Expected results
 2023-02-17

 Final report
 2023-03-06

#### Request for correction

Typing errors in laboratory's result forms are on laboratory's responsibility. Labquality accepts responsibility only for result processing. Requests must be notified by writing within three weeks from the date of this letter.

#### Authorized by

EQA Coordinator Mira Saarinen mira.h.saarinen@labquality.fi

#### **Expert**

Chief specialist Mia Kontio,

Finnish Institute for Health and Welfare, Helsinki, Finland

### Labquality Oy

Kumpulantie 15 FI-00520 HELSINKI Finland

Tel. + 358 9 8566 8200 Fax + 358 9 8566 8280

info@labquality.fi www.labquality.com



