

LABQUALITY

External Quality Assessment Scheme

5-hydroxyindoleacetic Acid (5HIAA) Round 1, 2023

Specimens

Please find enclosed 2 liquid pooled human sera samples S001 and S002, 1 mL, each. No preservatives are added.

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

5-hydroxyindoleacetic Acid (5HIAA) (serum)

Storage and use

Samples are sent to participants as soluble, unfrozen ready-to-use preparations. Samples should be analyzed immediately upon arrival. If the assay cannot be performed immediately, samples should be frozen (-20 °C). Thaw samples shortly before analysis, allow to reach room temperature and mix until homogeneous. Analyze samples as patient samples.

Result reporting

Please enter the results and methods via LabScala (www.labscala.com). If you have any problems, please contact the EQA Coordinator.

Log in to LabScala, fill in the fields for sample arrival date and storage conditions. Then use the green button to enter the results page. Select your method from the drop-down menu. Please report your result as nmol/L. If your device gives the result as ng/mL, please convert the results to nmol/L using a conversion factor 5.231.

S001



S002



2023-04-18

INSTRUCTIONS

Product no. 2525

LQ751622011-012/FI

Subcontracting: Sample preparation,
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
May 15, 2023.

Inquiries

EQA Coordinator

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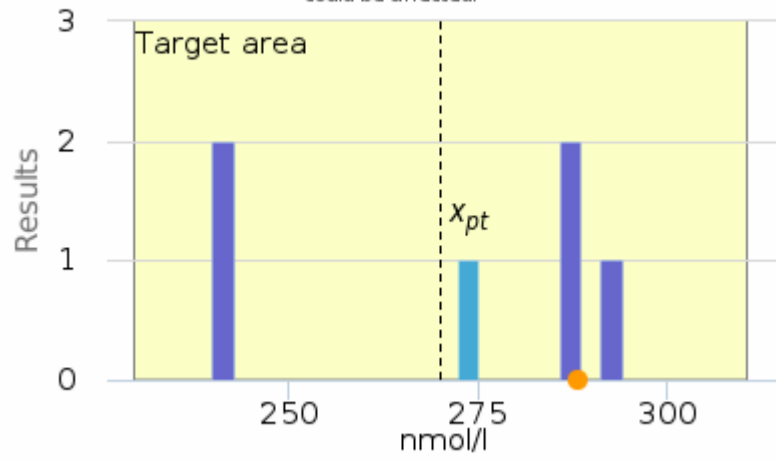
www.labquality.com



Hydroxyindolyl acetate (5-), serum |LC-MS/MS

Sample S001-Hydroxyindolyl acetate (5-), serum

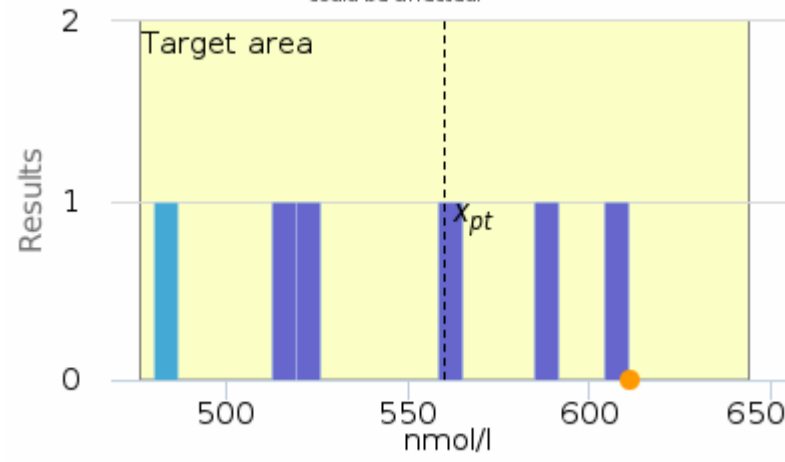
The uncertainty of the assigned value is not negligible, and evaluations could be affected.



■ All method groups ■ LC-MS/MS
● Own result: 288.00 (26.04.2023)
 Diff%: 6.66 | x_{pt} : 270.01
 Target area: 229.51-310.51 | Target: $\pm 15\%$

Sample S002-Hydroxyindolyl acetate (5-), serum

The uncertainty of the assigned value is not negligible, and evaluations could be affected.

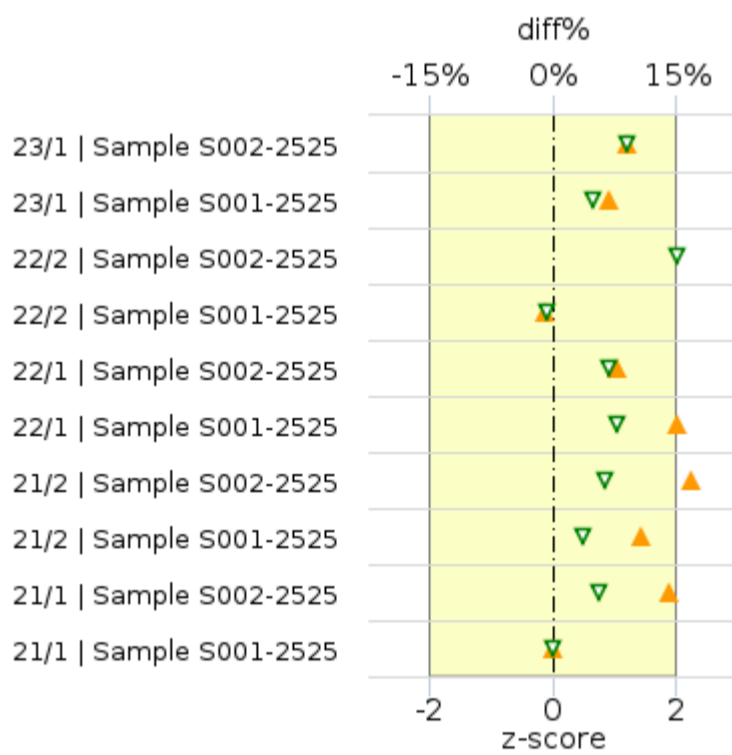


■ All method groups ■ LC-MS/MS
● Own result: 611.00 (26.04.2023)
 Diff%: 9.09 | x_{pt} : 560.10
 Target area: 476.09-644.12 | Target: $\pm 15\%$

	x_{pt}	sd	SEM	CV%	n
LC-MS/MS	270.01 nmol/l	27.35	12.23	10.1	5
All methods	270.69 nmol/l	24.52	10.01	9.1	6

	x_{pt}	sd	SEM	CV%	n
LC-MS/MS	560.10 nmol/l	42.62	19.06	7.6	5
All methods	546.75 nmol/l	50.23	20.51	9.2	6

History



▲ diff%
▼ Z-score is uncertain due to the small number of observations

Round	Sample	x_{pt}	Result	diff%	z-score
23/1	Sample S002-2525	560.10	611.00	9.09%	1.19
23/1	Sample S001-2525	270.01	288.00	6.66%	0.66
22/2	Sample S002-2525	100.75	176.60	75.29%	2.01
22/2	Sample S001-2525	3426.21	3395.50	-0.90%	-0.11
22/1	Sample S002-2525	539.56	580.90	7.66%	0.90
22/1	Sample S001-2525	94.30	108.50	15.05%	1.03
21/2	Sample S002-2525	149.51	174.54	16.74%	0.85
21/2	Sample S001-2525	169.67	187.59	10.56%	0.49
21/1	Sample S002-2525	232.09	264.80	14.09%	0.74
21/1	Sample S001-2525	568.71	569.10	0.07%	0.00

Report info**Participants**

7 participants from 6 countries.

Report info

Your own result should be compared to others using the same method.

Assigned values (\bar{x}_p , target values) are means of the results where results deviating more than ± 3 standard deviation from the median are removed. The standard uncertainty (u) of

the assigned value is reported as standard error of the mean (SEM). Additionally, if the measurement uncertainty of the target value is large an automatic text is printed on the report: "The uncertainty of the assigned value is not negligible, and evaluations could be affected."

In case the client's result is the only one in the method group, no assigned value will be calculated, no target area shown, and no statistics calculated. In case there are only a few results in the client's own method group, the result can be compared to all method mean or to a group that is similar to the own method.

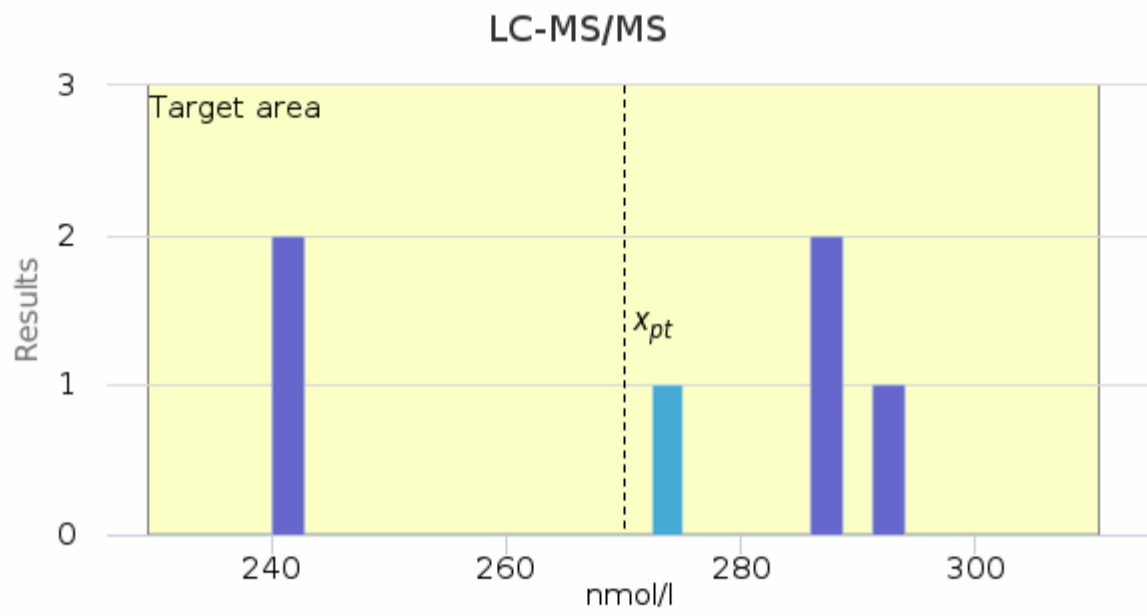
Results reported with $<$ or $>$ -signs cannot be included in the statistics.

For information on report interpretation and performance evaluation, please see the "EOAS Interpretation guidelines" LabScala User instructions (top right corner ?Help link).

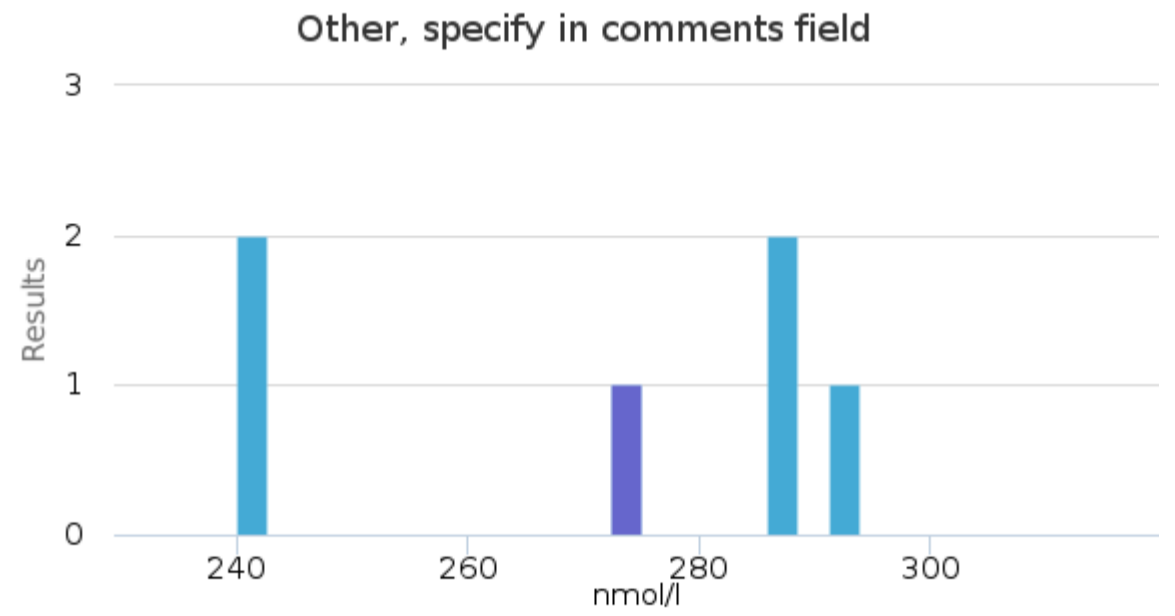
Sample S001 | Hydroxyindolyl acetate (5-), serum, nmol/l

Methodics	x_{pt}	Median	sd	CV%	SEM	min	max	Outliers	n
LC-MS/MS	270.01	287.71	27.35	10.1	12.23	240.00	294.00	-	5
Other, specify in comments field	-	-	-	-	-	274.10	274.10	-	1
All	270.69	280.91	24.52	9.1	10.01	240.00	294.00	-	6

Sample S001 | Hydroxyindolyl acetate (5-), serum, nmol/l | histogram summaries in LabScala



■ All method groups ■ LC-MS/MS (x_{pt} : 270.01 | Target area: 229.51-310.51 | Target: $\pm 15\%$)

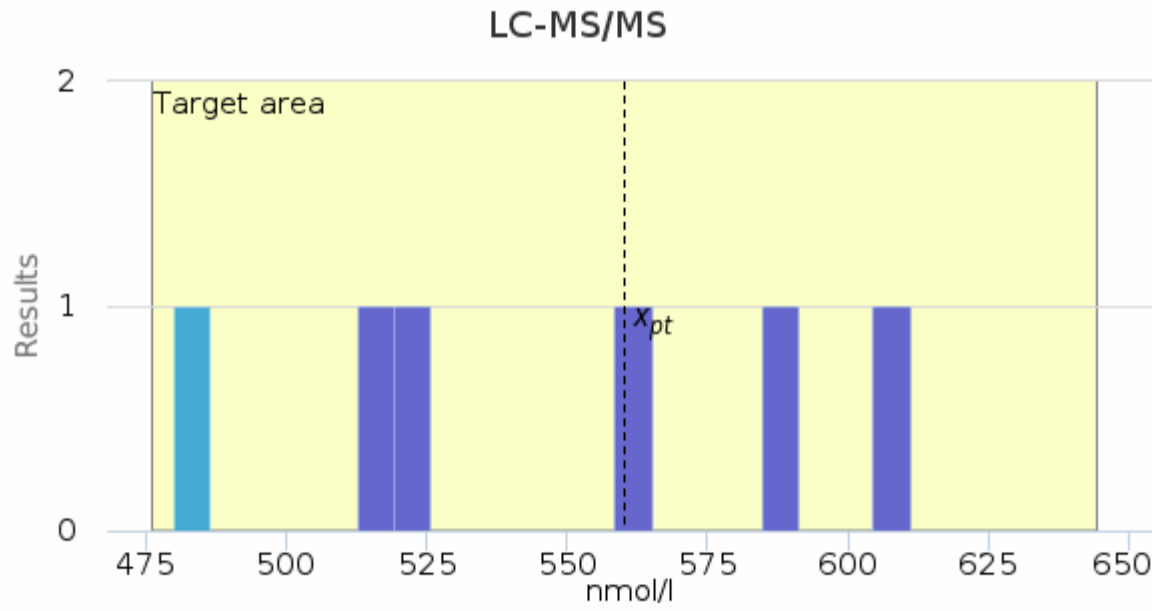


■ All method groups ■ Other, specify in comments field

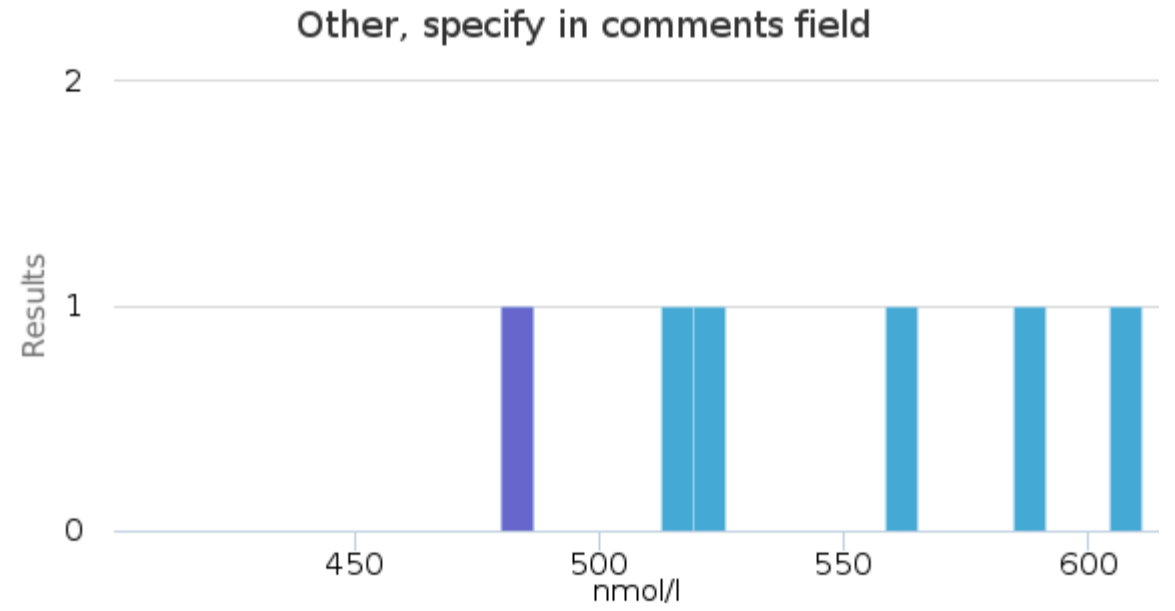
Sample S002 | Hydroxyindolyl acetate (5-), serum, nmol/l

Methodics	x_{pt}	Median	sd	CV%	SEM	min	max	Outliers	n
LC-MS/MS	560.10	564.00	42.62	7.6	19.06	514.00	611.00	-	5
Other, specify in comments field	-	-	-	-	-	480.00	480.00	-	1
All	546.75	542.21	50.23	9.2	20.51	480.00	611.00	-	6

Sample S002 | Hydroxyindolyl acetate (5-), serum, nmol/l | histogram summaries in LabScala



■ All method groups ■ LC-MS/MS (x_{pt} : 560.10 | Target area: 476.09-644.12 | Target: $\pm 15\%$)



■ All method groups ■ Other, specify in comments field

Report info**Participants**

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External Quality Assessment Scheme

5-hydroxyindoleacetic Acid (5HIAA) Round 1, 2023

Specimens

Sample S001 (LQ751623011) and sample S002 (LQ751623012) were prepared by dilution of serum pools with elevated 5HIAA concentration into a serum matrix.

Based on the previous tests and the results of this round, the samples are homogeneous, stable, and suitable for the external quality assessment scheme.

The materials were sent without temperature control packaging.

Report info

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

Comments – EQA Coordinator

There were six participants on the round of which five used mass spectrometry and one HPLC gradient method. If there is only one participant in any method group the target area can't be given. The client was given a comment what is their difference % compared to the mean of all results.

Comments - Expert

Both serum samples of this round were prepared to contain an elevated concentration of 5HIAA. All laboratories performed well with results within the ± 15 % target range.

End of report

2023-06-22

FINAL REPORT

Product no. 2525

Subcontracting: Sample preparation,
sample pretesting

Samples sent	2023-04-18
Round closed	2023-05-15
Final report	2023-06-22

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

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