





Product certificate ERNDIM IQCS Organic Acids

Product name Control Organic Acids

Product code	Product code	Colour cap
	ORG-02.1 ORG-02.2	Green Red

Date of issue 23 January 2023

Batch numbers and expiry date	Batch number	Exp. date stored at +2°C to +8°C
	 2022.1891  2022.1892	 2027-11  2027-11

Reconstitution volume 5.0 mL

Estimated concentrations *

Analyte	Estimated concentrations (µmol/L)	
	Level 1	Level 2
2 Methylcitric acid	3	40
2 OH Glutaric acid	29	225
3 Methylglutaconic acid	16	95
3 Methylglutaric acid	7	51
3OH3 Methylglutaric acid	38	311
3 OH Glutaric acid	4.0**	9.0**
3 OH Isovaleric acid	8	55
4 OH Butyric acid	15	179
Adipic acid	15	246
Creatinine	3181	5929
Ethylmalonic acid	13	199
Fumaric acid	7	178
Glutaric acid	15	229
Hexanoylglycine	5	40
Isovalerylglycine	7	43
Keto glutaric acid	47	554
Methylmalonic acid	13	229
Mevalonic acid	8	111
N acetylaspartic acid	24	374
Pyroglutamic acid	125	622
Sebacid acid	13	110
Suberic acid	15	180
Tiglylglycine	14	66
Vanillactic acid	16	101

* See ERNDIM Internal Quality Control System at the reverse

** Spiked amount

Organic Acids ERNDIM IQCS

Intended purpose

These materials are control materials (thus no calibrators) for the internal control of analytical systems for the determination of organic acids in urine.

Contents

Lyophilized human urine to which organic acids have been added to achieve an analytically and physiologically relevant level of the organic acids.

Storage and stability

The product in lyophilized form is stable for 5 years when stored at +2°C to +8°C. Expiration dates are found on the product certificate (reverse). The stability of the reconstituted product is 48 hours when handled appropriately: pure water, replacement of stopper and storage at 2-8 °C.

Instructions for use

- a. Remove cap.
- b. Insert a hollow needle through the stopper to remove the vacuum (to prevent material getting on the stopper)
- c. Remove stopper.
- d. Add 5 mL aqua destillata
- e. Replace stopper
- f. Let stand for 15 minutes at room temperature
- g. Mix carefully during 20 minutes at room temperature
- h. Process product as patient sample

ERNDIM Internal Quality Control System: the Concept

The ERNDIM Internal Quality Control System (IQCS) consists of samples and a website for data management.

Samples

Samples contain analytes specifically selected for laboratories active in the field of inborn errors of metabolism. They come in two levels (1=low and 2=high) with for each analyte a relevant concentration.

Data Management

ERNDIM offers users of control materials a data management system (Note: this is an option to serve users; users do not have the obligation to use it). The strength of this system is that it does not only monitor the data of the laboratory but also compares the labs results with results of labs using the same batch of internal control materials.

In essence users can submit results every time they do an analytical run with the control material and then download two reports.

The Review Day Report shows the results of the last run in comparison to

- a) the acceptance limits set by the lab,
- b) the mean of all previous runs of the lab
- c) the mean of all laboratories.

By clicking on the name of a specific analyte in the report, Shewhart charts of that analyte are shown.

The Cumulative Table report shows the cumulative data of the lab.

Details can be found under [www.erndimqa.nl/General information/Use Website](http://www.erndimqa.nl/General%20information/Use%20Website).

Remark

On delivery of the control materials, the certificate in the package insert shows the values as measured by a peer laboratory. Once in use laboratories submit their results and the reports will show the trimmed mean of all laboratories. This mean is a running mean which changes with every new submission: Thus a dynamic assigned value resulting from "crowd targeting".

Precautions and warnings

1. For *in vitro* diagnostic use only.
2. This product should be handled with care, as appropriate for biological materials. Outdated and left-over material should be discarded as potentially infectious material, according to the procedures in your institute.

References

www.ERNDIMQA.nl

Dr E.A.E. van der Hagen on behalf of the ERNDIM Internal Quality Control System Working Group

