





Product certificate ERNDIM IQCS Amino Acids

Product name Control Amino Acids

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

Date of issue 01-07-2018

Batch numbers and Expiry date	Batch number	Exp. date stored at +2°C to +8°C
	 2018.1801	 2023-02
	 2018.1802	 2023-02

Reconstitution volume 1.0 mL

Estimated concentrations *

Analyte	Estimated concentrations (µmol/L)	
	Level 1	Level 2
Alanine	313	880
α-Aminobutyric acid	29	92
Arginine	27	507
Asparagine	37	205
Aspartic acid	18	98
Citrulline	20	406
Cystine	14	34
Cystathionine	8	20
Glutamine	531	1073
Glutamic acid	74	240
Glycine	291	948
Histidine	97	380
Hydroxyproline	48	102
Isoleucine	31	377
Leucine	76	839
Lysine	76	467
Methionine	9	226
Ornithine	62	614
Phenylalanine	74	922
Proline	191	565
Serine	51	448
Taurine	48	398
Threonine	100	402
D-Tryptophan	146	320
Tyrosine	51	838
Valine	151	804

* See ERNDIM Internal Quality Control System at the reverse

Amino Acids ERNDIM IQCS

Intended purpose

These materials are control material (thus no calibrators) for the internal control of analytical systems for the determination of amino acids in serum.

Contents

Lyophilized human serum to which amino acids have been added to achieve an analytically and physiologically relevant level of the amino 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 comparable to patient samples.

Instructions for use

- a. Remove cap and stopper.
- b. Add 1 mL aqua destillata
- c. Replace stopper
- d. Let stand for 15 minutes at room temperature
- e. Mix carefully during 20 minutes at room temperature
- f. Process product as patient sample, i.e. it is advisable to immediately deproteinise samples and separate the supernatant to minimise stability problems of certain amino acids.
- g. If not analysed on the same day according to your usual procedure for patient samples in your laboratory, the supernatant should be stored at -24°C to -16°C.

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

The website for data management is an extension of the website for the ERNDIM schemes and can be used to manage the laboratories internal quality control data (not obligatory; this is an option to serve ERNDIM users). Results are entered and a report can be requested showing the results of all analytes in the last run in comparison with

- a) the running mean of the lab,
- b) the running mean of all labs using the batch of internal control material and
- c) the acceptance limits set by the lab.

With a simple click on a specific analyte a classic Shewhart Chart appears showing the cumulative data of the lab. Details can be found under www.erndimqa.nl (see also remark 1).

Remarks

1. The ERNDIM IQCS will be implemented in steps between July 2018 and January 2020. The release of samples for amino acids (July 2018) will be a couple of months ahead of the availability of the website (estimated October 2018). Once the website is released all users will be informed that they can start using it.
2. 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. Tested and found negative for Hepatitis B Surface Antigen (HbsAg), antibody to hepatitis C (HCV) and antibody to HIV.
3. 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 C.W. Weykamp on behalf of the ERNDIM Internal Quality Control System Working Group

