

Product certificate Acylcarnitines


Product name Control Acylcarnitines

Product code

Product code	Colour cap
CAR-01	Green

Date of issue 05-12-2017

Batch numbers and Expiry date

Batch number	Exp. date stored at +2°C to +8°C
LOT 2017.097	 2021-12

Reconstitution volume

1.0 mL

Calculated Consensus Values

Analyte	Calculated Consensus Value (µmol/L) *	95% Confidence Interval *	Expected Range results in Laboratory *
3-OH-Palmitoylcarnitine	0.173	0.16 - 0.19	0.11 - 0.24
3-OH-Stearoylcarnitine	0.271	0.24 - 0.30	0.14 - 0.40
Acetylcarnitine	19.9	18.75 - 21.05	14.59 - 25.21
Butyrylcarnitine	2.36	2.25 - 2.47	1.83 - 2.89
Carnitine Free	66.5	64 - 69	56 - 77
cis-5-Tetradecenoylcarnitine	0.131	0.12 - 0.14	0.10 - 0.17
Decanoylcarnitine	1.98	1.8 - 2.1	1.2 - 2.8
Glutarylcarnitine	0.411	0.34 - 0.48	0.09 - 0.73
Hexanoylcarnitine	0.843	0.80 - 0.89	0.62 - 1.06
Isovalerylcarnitine	2.40	2.3 - 2.5	1.9 - 2.9
Malonylcarnitine	0.344	0.26 - 0.43	0 - 0.69
Methylmalonylcarnitine	0.344	0.26 - 0.43	0 - 0.69
Octanoylcarnitine	2.14	2.0 - 2.3	1.6 - 2.7
Oleoylcarnitine	0.635	0.60 - 0.67	0.49 - 0.78
Palmitoylcarnitine	1.70	1.6 - 1.8	1.4 - 2.0
Propionylcarnitine	6.18	5.8 - 6.5	4.5 - 7.8
Stearoylcarnitine	0.613	0.59 - 0.64	0.49 - 0.74
Tetradecanoylcarnitine	0.572	0.54 - 0.60	0.44 - 0.70
Tiglylcarnitine	0.422	0.39 - 0.46	0.27 - 0.58

* See Value Assignment and Ranges at the reverse



Acylcarnitines

Intended purpose

These materials are control materials (thus no calibrators) for the control of analytical systems for the determination of acylcarnitines in serum.

Contents

Lyophilized human serum to which acylcarnitines have been added to achieve an analytically and physiologically relevant level of the acylcarnitines.

Value Assignment and Ranges

The specimens are prepared from equal amounts of the specimen pools used to manufacture the ERNDIM External Quality Assessment Scheme samples. The assigned values represent the average of the mean consensus concentrations of the 4 pools equal to the concentrations in the annual report (see reverse of this product certificate). The column with the 95% Confidence Interval shows the confidence interval of the assigned value (narrow range). The column with the expected range shows the range in which results of 70% of individual laboratories can be expected (wide range).

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 and stopper
- b. Add 1.0 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

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. C.W. Weykamp

