ISO 21468:2020 (E)

Infant formula and adult nutritionals — Determination of free and total choline and free and total carnitine — Liquid chromatography tandem mass spectrometry (HPLC-MS/MS)

Contents

Foreword

1 Scope

2 Normative references

3 Terms and definitions

4 Principle

5 Reagents and materials

6 Preparation of solutions

- 6.1 Mobile phase A
- 6.2 Mobile phase B
- 6.3 HPLC injector wash
- 6.4 Preparation of choline and carnitine stock solutions
- 6.5 Preparation of working standard solutions

7 Apparatus

8 Procedure

- 8.1 Sample preparation
- 8.1.1 Samples needing reconstitution
- 8.1.2 Analysis of free carnitine and choline
- 8.1.3 Analysis of total carnitine and choline
- 8.2 Instrument parameters
- 8.2.1 HPLC parameters
- 8.2.2 LC-MS parameters

9 Calculations

10 Precision

- 10.1 General
- 10.2 Repeatability
- 10.3 Reproducibility

11 Test report

Annex A (informative) Example chromatograms

Annex B (informative) Precision data

Page count: 16