

To perform proficiency tests and method validation studies according to the following standards

- ISO 17043
- ISO 13528
- ISO 5725:2, ISO 5725:3, ISO 5725:5
- DIN 38402 A 42, DIN 38402 A 45
- International Harmonized Protocol (IUPAC)
- Swiss food manual etc.

Lab management

- Store addresses, contact persons, order numbers and tax numbers of trial participants
- Personalized bulk e-mail function with individual attachments
- Assignment of randomly generated lab codes

Sample management

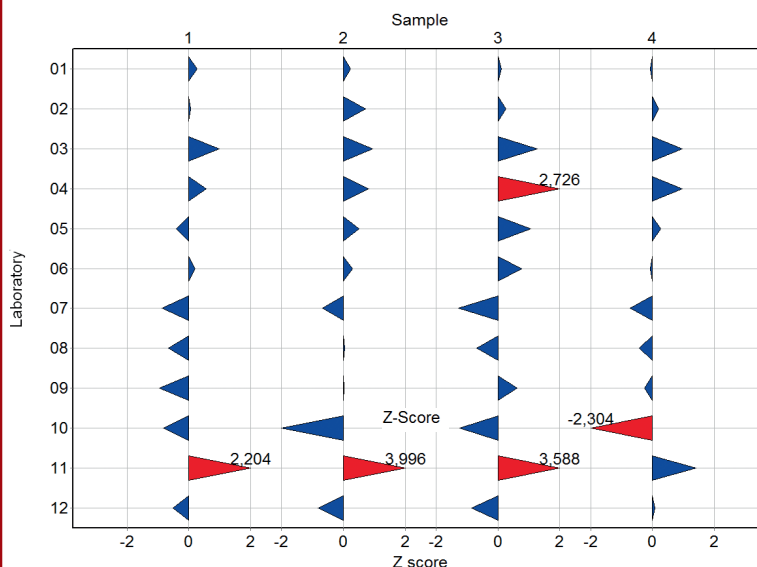
- Homogeneity and stability testing
- Individual assignment of analytes
- Label printing with or without bar codes
- Participant-specific sample codes
- Documentation of test portion use

Data management

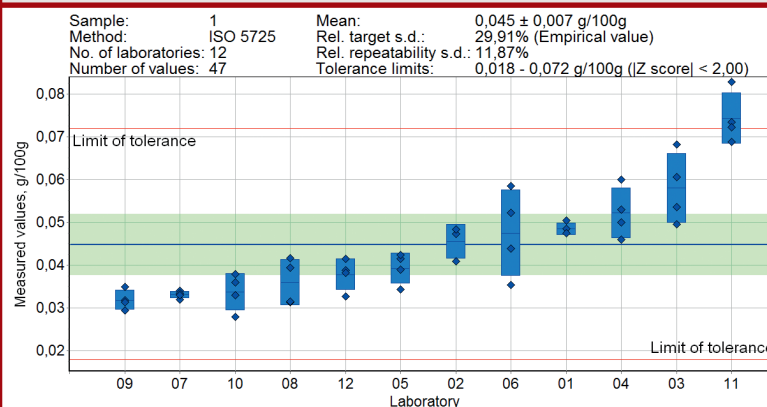
- Professional database
- Customizable data collection tool (RingDat)
- Optional web-based entry of measurement data (RingDat Online): participants enter their data in a browser window
- Documentation of sample shipment and arrival, date of analysis, data import, analyst etc.
- Storage of measurement values, detection methods, sample preparation steps, detection limits, quantification limits, uncertainties, contact details, etc.
- Extensive selection options according to participant details and analytical methods
- Documentation of all data changes in the database
- Backup function

Type of measurements

- For physical, chemical, biochemical and microbiological measurement methods
- Quantitative, semi-quantitative and qualitative data
- Consideration of values below the detection or quantification limit
- Evaluation based on logarithmized data



▲ Chart of laboratory or analyst-specific error: z scores in accordance with ISO 13528



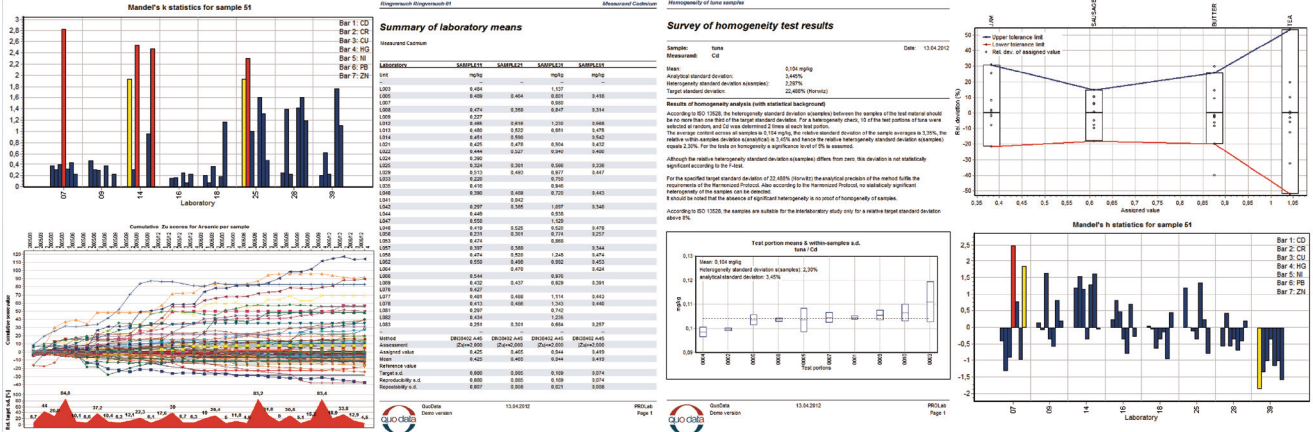
▲ Overview of measured values along with the precision data and tolerance limits

Reporting

- Extensive report template collection
- Automatic creation of composite reports with participant-specific sections, freely configurable
- Numerous charts: measured values, z scores, histograms, kernel density estimations, measurement uncertainties, Youden plots, etc.
- Charts and report templates can be edited individually and saved for later use
- Charts can be broken down according to analytical method and sample preparation
- Charts can be saved to the clipboard or as PNG, BMP, EMF, SVG
- All reports can be saved, e.g. as Excel, PDF or Word file

REQUIREMENTS: Windows XP, 7 or 8





Assigned value and target standard deviation

- Assigned value options: reference value, arithmetic mean of selected reference laboratories, robust mean, mode of kernel density estimation
- Target standard deviation options: empirical standard deviation, fixed absolute or relative reference standard deviation, Horwitz standard deviation (with/without capping), variance function, robust standard deviation
- Optional outlier tests: Grubbs test and Cochran test

Precision data

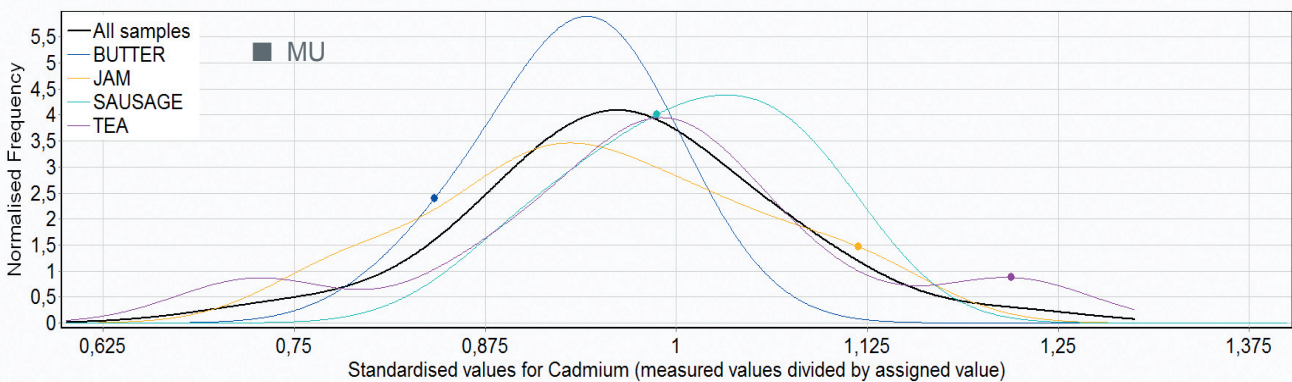
- Repeatability and reproducibility standard deviation
- Intermediate standard deviation
- Calculation of precision data for chosen labs or analytical methods

Laboratory performance assessment

- z scores
- z_u scores
- z' scores
- zeta scores and E_n numbers
- z scores for split-level experiments

Service

- Free annual updates
- Extensive manual
- Hotline for statistical and technical questions free of charge
- PROLab user forum on the QuoData website
- Annual user workshops
- PROLab Smart included
- We will implement your wishes with respect to further features and functions
- Web-based data entry (RingDat Online) via QuoData web server



- Combination scores (RLP, RSZ)
- Assessments across ring tests
- Consideration of measurements below the quantification limit

▲ Kernel density estimation of the standardized values for 4 samples; results of one laboratory are highlighted

Measurement uncertainties

- MU of individual labs
- MU of consensus values
- MU of reference values
- Assessment via zeta scores and E_n Numbers

Team work

Several employees can work on one and the same database (Windows shared folders)

Test PROLab Plus

FREE unlimited 30-day trial version available – please contact us

