SRM 2372 Human DNA Quantitation Standard
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SRM 2372 is intended to enable the comparison of DNA concentration measurements across time and place. Manufacturers can use SRM 2372 to validate the values assigned to their own reference materials. Individual forensic laboratories can use SRM 2372 to validate new DNA quantitation methods as well as to verify the assigned DNA concentration of their in-house calibration standards.

The availability of SRM 2372 provides a Quality Assurance tool for those laboratories that desire to make their DNA quantitation measurements traceable to a National Standard.

Components
A: Male/single donor/RNased/NIST
B: Female/multiple donors/NIST
C: Mixture/male & female/commercial

Quantities supplied
110 μL of Human Genomic DNA ≈ 50ng/μL

Certification
Decadic Attenuance (Absorbance) by a US National Reference Spectrophotometer
Homogeneity by a Cary 100 Bio Spectrophotometer
Validation of conventional [DNA] by Interlaboratory Study and NIST qPCR studies.

Overview of SRM 2372 Values and Use

Certified Values
SRM 2372 Components A B C

Sources of Error:
- Assay variability
- dynamic range
- locus probed
- Instrument variability
- Pipetting variability

Informational Values
DNA Concentration (ng/μL)
1 OD = 50 ng/μL

Measure Unknown DNA Samples

“Calibrated” NIST-Traceable Calibrant for Use in Daily Work

In this limited study was advertised at the NIJ Grantees meeting, June of 2006. Net result of the study: the SRM materials are appropriate for use with different qPCR methods.