

NIST STANDARD REFERENCE MATERIALS (SRMS) FOR THE FORENSIC HUMAN IDENTITY COMMUNITY: PAST, PRESENT, AND FUTURE DIRECTIONS YOU CAN ASSIST IN MAKING.

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The National Institute of Standards and Technology (NIST) supports accurate and compatible measurements by certifying and providing over 1300 Standard Reference Materials[®] with well-characterized composition or properties, or both. These materials are used to perform instrument calibrations in units as part of overall quality assurance programs, to verify the accuracy of specific measurements and to support the development of new measurement methods. The Human Identity Project at NIST as part of the Chemical Science and Technology Laboratory, Biochemical Science Division, Applied Genetics group has been producing DNA based Standard Reference Materials (SRMs) for the Forensic Human DNA identity community since the 1992 release of SRM 2390 DNA Profiling Standard for Restriction Fragment Length Polymorphism (RFLP). Other SRMs of interest to this community include: SRM 2391(a,b) PCR-Based DNA Profiling Standard, SRM 2395 Human Y-Chromosome DNA Profiling Standard, SRM 2392 Mitochondrial DNA Sequencing (Human), SRM 2392-I Mitochondrial DNA Sequencing,(Human HL-60 DNA) and SRM 2372 Human DNA Quantitation Standard.

Over the years the Certificates of Analysis for these SRMs have been updated with new information in order to keep the materials current to the areas of interest. When materials start getting low we actively pursue replacement of the material. Such is the case with SRM 2391 that is in it's third generation as SRM 2391b. Presentation of not only the history of the SRM certificate updating but also a questionnaire is available for input into the design for the next generation SRM 2391c.