

HOW TO MAKE NIST TRACEABLE MATERIALS

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NIST's first SRM for the forensic and paternity DNA typing communities was released in 1992, SRM 2390 "DNA Profiling Standard" for RFLP typing. As the methodologies of DNA typing evolved SRM 2391 "PCR-based DNA profiling standard" was released in 1995. The forensic DNA typing community awareness and usage of NIST SRMs and the need to know the meaning of NIST traceability increased primarily because DNA Advisory Board (DAB) Standard 9.5 which states that a laboratory "shall check its DNA procedures annually or whenever substantial changes are made to the protocol(s) against an appropriate and available NIST standard reference material or standard traceable to a NIST standard."

The available NIST SRMs (2390, 2391, 2392) that support the DNA typing community will be described along with examples on how an individual laboratory can create a NIST-traceable material in order to meet the DAB standards. Quality control of NIST materials and the essentials of traceability will be presented.