



DATE: 03 July 2014

Product Identifier

SRM Number: 2394

SRM Name: Heteroplasmic Mitochondrial DNA Mutation Detection Standard

Under the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) 29 CFR 1910.1200, this Standard Reference Material (SRM) is NOT classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified. There are no hazard pictograms, hazard statements or signal word associated with it. Safety Data Sheet information is not required. This document may be used in conjunction with your hazard communication program.

Exemption: 1910.1200(b)(6)(xii). This SRM is a biological material and should be considered a potential biological hazard.

Description: This Standard Reference Material (SRM) is composed of human mitochondrial DNA mixtures which simulate different levels of heteroplasmy. SRM 2394 is intended to provide quality control benchmarks for forensic, medical, and DNA scientists to assess the detection sensitivity of low-frequency mutations, single nucleotide polymorphisms (SNPs) in either mitochondrial DNA (mtDNA) or in pooled nuclear DNA samples, or heteroplasmic sites in mtDNA. A unit of SRM 2394 consists of a single protective plastic box containing ten tubes, each tube contains 25 μL of DNA at a concentration of 8 ng/ μL in 10 mM Tris-HCl, pH 8.5.

Additional Notes for Biomaterials: SRM 2394 is a human source material. Since there is no consensus on the infectious status of extracted DNA, handle SRM 2394 components as Biosafety Level 1 Material, capable of transmitting infectious disease as recommended for any potentially infectious human serum or blood specimen by the Centers for Disease Control and Prevention (CDC) Office of Safety, Health, and Environment and the National Institutes of Health (NIH). See Certificate of Analysis for storage and use instructions.

Disposal: SRM 2394 components and derived solutions should be disposed of in accordance with local, state, and federal regulations.

Transport Information: This material is not regulated by the U.S. Department of Transportation (DOT) and/or International Air Transportation Association (IATA).

Disclaimer: This document was prepared carefully, using current references. Users of this SRM should ensure that this document and the corresponding Certificate of Analysis in their possession are current. This can be accomplished by contacting the SRM Program: telephone (301) 975-2200; fax (301) 948-3730; e-mail srmmsds@nist.gov; or via the Internet at <http://www.nist.gov/srm>.