



DATE: 22 December 2020

Product Identifier

SRM Number: 2373

SRM Name: Genomic DNA Standards for *HER2* Measurements

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 SRM is intended primarily for use as a standard to assign ratios of the human epidermal growth factor receptor 2 gene (*HER2*, the official gene symbol *ERBB2*) to unamplified reference genes. It consists of genomic DNA extracted from five breast cancer cell lines with different amounts of amplification of the *HER2* gene. The five purified genomic DNAs were solubilized in a buffer consisting of 10 mmol/L tris (hydroxymethyl) aminomethane and 0.1 mmol/L ethylenediaminetetraacetic acid disodium salt (EDTA) pH 8.0 (TE^{-4}). The five components are genomic DNA materials derived from human cell lines SK-BR-3, MDA-MB-231, MDA-MB-361, MDA-MB-453, and BT-474, labeled A, B, C, D, and E, respectively. A unit of SRM 2373 consists of one vial of each component, containing approximately 100 μ L of DNA solution. Each of these vials is labeled and is sealed with a color-coded screw cap.

Additional Notes for Biomaterials: SRM 2373 IS INTENDED FOR RESEARCH USE. THIS IS A HUMAN SOURCE MATERIAL. Since there is no consensus on the infectious status of extracted DNA, handle the SRM 2373 components as Biosafety Level 1 materials 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 2373 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 Transport Association (IATA).

Disclaimer: The NIST information in this document is specific to the NIST product and is believed to be correct, based upon our current knowledge. This document may not necessarily be all inclusive and should be used only as a guide. NIST does not guarantee the accuracy or completeness of this information. The only official source for specific values and uncertainties is the certificate or report.

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; e-mail srmmsds@nist.gov; or via the Internet at <https://www.nist.gov/srm>.