

## **Genomic DNA Standards for HER2 Measurements**

|                 |                                   |
|-----------------|-----------------------------------|
| Art. ID         | NIST-2373                         |
| Unit            | 5 vials, 1 each level             |
| Deliverydetails | No Dangerous Good /not restricted |

### Description

This Standard Reference Material (SRM) is for use to assign ratios of the Human epidermal growth factor 2 gene (HER2, the official gene symbol ERBB2) to unamplified reference genes. Measurements of the amplification (increased copies) of the HER2 gene in breast cancer samples are used as a biomarker for determining the classification and the best treatment for breast cancers. SRM 2373 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<sub>2</sub>). 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 five vials, one of each component, containing approximately 100 µL of DNA solution. Each of these vials is labeled and is sealed with a color-coded screw cap.