

## DNA Assay Kit

### Product Information

**Cat.No.**

Kit-0295

**Product Overview**

DNA Assay Kit is a fluorimetric quantitation of nanogram DNA.

**Description**

DNA quantitation is a common practice in molecular biology. Very often DNA is available in minute quantities and the traditional UV 260 nm absorbance method requires microgram quantities for reliable results. Accurate determination of DNA concentration, especially when DNA is present at low concentrations, is crucial for reproducible results in sequencing, cloning, transfection and DNA labeling. Simple, direct and automation-ready procedures for measuring DNA concentration are very desirable. This DNA assay kit is designed to accurately measure nanogram quantities of plasmid DNA, cDNA, DNA following polymerase chain reaction and DNA eluted from gels. The improved method utilizes Hoechst dye that binds specifically with double-stranded DNA. The fluorescence intensity, measured at 450 nm ( $\lambda_{exc} = 350$  nm), is directly proportional to the DNA concentration in the sample. The optimized formulation substantially reduces interference by substances in the raw samples.

**Applications**

Direct Assays: plasmid DNA, genomic DNA, cDNA, DNA following polymerase chain reaction, and DNA extracted from gel and other matrices.

**Usage**

For research use only (RUO)

**Storage**

Store DNA Standard at -20°C. Store Reagent at 4°C.

**Kit Components**

Reagent 50 mL Standard: calf thymus DNA (10 µg/mL). 1 mL

## DNA Assay Kit

**Detection method** Fluorometric

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### Features & Benefits

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Sensitive and accurate. Linear detection range 2 ng to 40 ng (100 – 2,000 ng/mL) calf thymus DNA in 96-well plate assay. Simple and high-throughput. The "mix-and-read" procedure involves addition of a single working reagent and reading the fluorescence intensity. Can be readily automated as a high-throughput assay for thousands of samples per day. Low interference. RNA, salt (up to 3M NaCl), detergent (< 0.01% SDS) and common DNA extraction buffer do not interfere in the assay.

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