

1×dsDNA HS Assay Kit

Please read the manual carefully prior to use.

Cat. No. GS401

Storage: at 2-8 °C in dark for one year

Description

1×dsDNA (double-stranded) HS (High Sensitivity) Assay Kit is a simple, sensitive and accurate kit for the fluorescence quantitative detection of double-stranded DNA. The kit includes a pre-mixed working solution with fluorescent dye and dsDNA standards. The assay is highly selective for dsDNA and can quantify 0.2-100 ng of dsDNA samples. The product is easy to use, add the dsDNA sample to the working solution at room temperature, and read the concentration using a Qubit Fluorometer.

Features

The operation is simple, and the quantification is sensitive and accurate.

Application

Detection range of 0.2 ng to 100 ng of dsDNA

Kit Contents

Component	GS401-00 (20 rxns)	GS401-01 (100 rxns)	GS401-02 (500 rxns)
1×dsDNA HS Working Solution	10 ml	50 ml	2×125 ml
1×dsDNA HS Standard #1 (0 ng/μl)	50 μl	250 μl	1.25 ml
1×dsDNA HS Standard #2 (10 ng/μl)	50 μl	250 μl	1.25 ml

Protocol

- 1. Place the components of the kit at room temperature for 30 minutes to equilibrate it to room temperature before use.
- 2. The number of samples to be tested is N, take N + 20.5 ml PCR tubes for standard calibration and sample detection. Be sure to calibrate with standards for first use, and then at regular intervals.
 - Note: 0.5 ml PCR tubes with no scales on the side walls must be used.
- 3. Label 0 ng/ μ l, 10 ng/ μ l, sample #x, #y..... on the lid of the PCR tube.
 - Note: Do not label the side walls of the PCR tubes.
- 4. Preparation of standards for calibration. Add 190 μ l of 1×dsDNA HS Working Solution to the PCR tubes labeled 0 ng/ μ l and 10 ng/ μ l, add 10 μ l of 1×dsDNA HS standard #1 (0 ng/ μ l) and 1× dsDNA HS standard #2 (10 ng/ μ l) to the corresponding tubes, vortex to mix, and briefly spin.
- 5. Prepare sample detection solution. Add 198 μ l of 1× dsDNA HS Working Solution to the sample PCR tube. Add 2 μ l of the dsDNA sample. Vortex to mix, and briefly spin.
 - Note: The above is the recommended volume. Add $1 \times$ dsDNA HS Working Solution in a range of 190-199 μ l, and the volume of the dsDNA sample to be tested ranges from 1-10 μ l, with a final volume of 200 μ l per tube.
- 6. Incubate all PCR tubes for 2 minutes at room temperature away from light.
- 7. (Using Qubit 3.0 as an example) Select dsDNA on the Qubit Fluorometer > dsDNA High sensitivity ---> Read standards > Calibration 0 ng/µl > Calibration 10 ng/µl > Run Sample ---> Select sample volume ---> Detect sample DNA concentration.

For research use only, not for clinical diagnosis

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