Equalbit® 1 × dsDNA HS Assay Kit

NB-54-0027-01
NB-54-0027-02

Equalbit 1 × dsDNA HS Assay Kit

#Cat: NB-54-0027-01 Size: 100assays

#Cat: NB-54-0027-02 Size: 500assays

Introduction

Equalbit 1 × dsDNA HS (High Sensitivity) Assay Kit is a simple, sensitive and accurate kit for the fluorescence quantitative detection of doublestranded DNA (dsDNA). This kit includes premixed working solution (with fluorescent dye) and dsDNA standards. The kit has good linearity in the range of 0.2-100 ng for dsDNA samples. It allows accurate quantification of samples at concentration from 10 pg/μl to 100 ng/μl, and has good tolerance for some conventional contaminants such as RNA, salts, free nucleotides, proteins, solvents, decontaminants, etc. The kit is easy to operate. Add the appropriate amount of sample directly to the working solution and detect by Qubit fluorometer.

Contents of Kits

Component	NB-54-0027-01 (100 assay)	NB-54-0027-02 (500 assay)
Equalbit 1 × dsDNA HS Working Solution	50 ml	250 ml
Equalbit 1 × dsDNA HS Standard #1 (0 ng/μl in TE buffer) Equalbit	1 ml	5 ml
1 × dsDNA HS Standard #2 (10 ng/μl in TE buffer)	1 ml	5 × 1 ml

Storage

Store at 2 ~ 8°C away from light and adjust shipping method according to different destinations; Store Equalbit 1 × dsDNA HS Standard #2 at -30 ~ -15°C for long-term storage.

Application Scope

10 pg/μl to 100 ng/μl of dsDNA samples.

Operation Flow

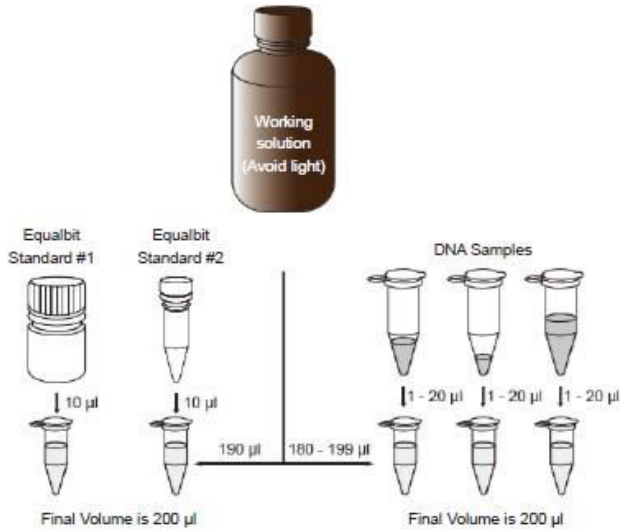

Fig 1. Equalbit 1 × dsDNA HS Assay Kit Operation Flow

Experiment Process

The following steps apply to Qubit 2.0, 3.0 and 4.0 fluorometers

1. Before use, equilibrate the components of the kit to room temperature.
2. Prepare a sufficient number of 0.5 ml PCR tubes.

▲ Only 0.5 ml PCR tubes can be used. Qubit assay tubes (Cat. No. Q32856) or Axygen PCR-05-C tubes (VWR, part no. 10011-830) are recommended.

3. Label the lid of each PCR tube. Do not label the side walls of the PCR tubes as this may interfere with the acquisition of fluorescent signals.
4. Preparation of assay standards. Add 190 µl of Equalbit 1 × dsDNA HS Working Solution to the standard PCR tube, then add 10 µl of Equalbit 1 × dsDNA HS Standard #1 and Standard #2 to the corresponding standard PCR tube. Gently vortex for 2-3 sec and try to avoid air bubbles. Make sure that accurate volumes are pipetted during this step.
5. Preparation of assay samples. Add 180-199 µl of Equalbit 1 × dsDNA HS Working Solution to the sample PCR tubes. Add 1-20 µl of the dsDNA sample to make the final volume of each sample PCR tube 200 µl. Gently vortex for 2-3 sec and try to avoid air bubbles. Make sure that accurate volumes are pipetted during this step.
6. Incubate all PCR tubes for 2 min at room temperature and keep them away from light.
7. Follow the operating instructions of the Qubit fluorometer and select the dsDNA High Sensitivity Assay program to determine the concentration.

Notes

1. During the use of Equalbit 1 × dsDNA HS Working Solution, to avoid contamination, please pipette enough amount into a centrifuge tube before use and then take the corresponding amount (180-199 µl) from the tube for the experiment.
2. Please invert and mix the standards and samples before use to avoid uneven aspiration that may lead to biased results.
3. To ensure accurate quantification results, use a calibrated pipette for the operation.
4. Please perform the quantitative assay at room temperature. Before use, equilibrate the components in the kit to room temperature. During the experiment, do not hold the PCR tube of the assay by hand for a long time to avoid light.
5. Be sure to complete assay of all samples under conditions away from light and within 3 h of sample addition to avoid fluorescence quenching that could lead to biased results.