Ver. HB221028

dsDNA HS Assay Kit

Product description

dsDNA HS Assay Kit for Qubit® is a fast, sensitive and accurate double-stranded DNA (dsDNA) fluorescence quantitative detection kit. The kits include concentrated assay reagent, dilution buffer and DNA standards. This kit is highly selective for dsDNA over RNA and is accurate for initial sample concentration from 10 pg/μL to 100 ng/μL. It is an ideal kit for DNA sample quantification such as NGS input DNA quantification and DNA library quantification. The kit has good tolerance to conventional contaminants such as salts, free nucleotides, solvents, detergents and proteins.

Components

Components No.	Name	Concentration	12640ES60 (100 T)	12640ES76 (500 T)
12640-A	dsDNA Reagent	200×concentrate in DMSO	250 μL	1.25 mL
12640-B	dsDNA Buffer	Not applicable	50 mL	250 mL
12640-C	dsDNA Standard 1	0 ng/μL in TE buffer	1 mL	5×1 mL
12640-D	dsDNA Standard 2	10 ng/μL in TE buffer	1 mL	5×1 mL

Specifications

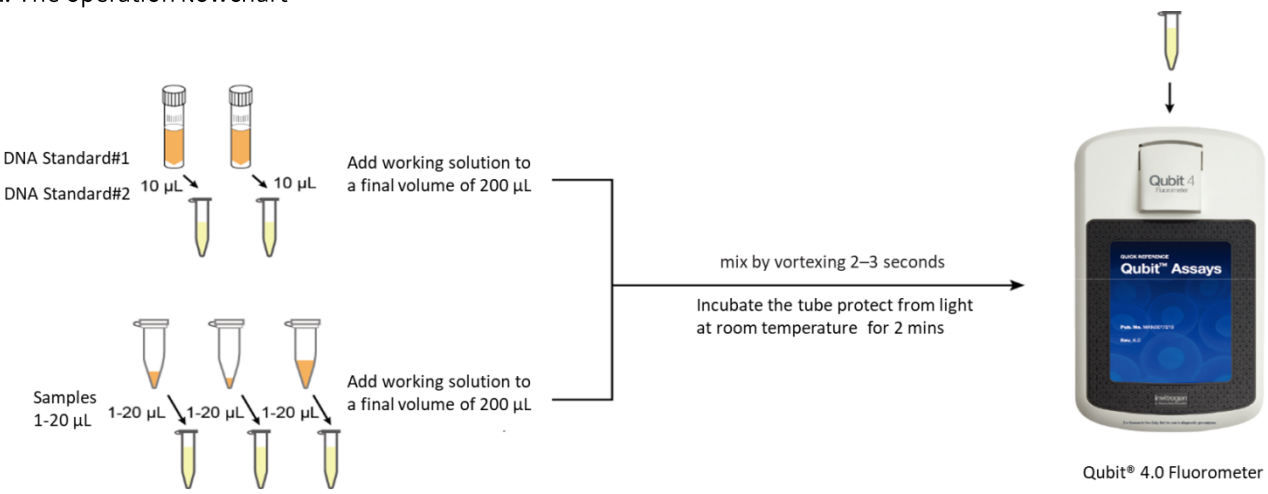
Assay	dsDNA Quantitation
Excitation/Emission	480/520
For Use With (Equipment)	Qubit Fluorometer
No. of Reactions	100T/500T
Product Line	Qubit Quantitation
Quantitation Range	10 pg/μL to 100 ng/μL
Sample Volume	1 μL to 20 μL
Detection Method	Fluorescent

Shipping and Storage

All the components are shipped with ice pack and can be stored at 2-8°C away from light for one year.

Instructions

1. The operation flowchart



Qubit® 4.0 Fluorometer

2. Preparation

2.1 Equilibrate the components to room temperature before use.

2.2 Prepare a sufficient of 0.5-mL tubes and label the table at the lid. Do not label the side wall of the tube to avoid affecting the fluorescence signal collection. The recommended 0.5-mL tubes include Qubit® assay tubes (Cat#Q32856) and Axygen® PCR-05-C tubes (Cat#10011-830).

3. Prepare the working solution

Use dsDNA Buffer to dilute the dsDNA Reagent to 1× (for example: take 1 μL of dsDNA Reagent and add 199 μL of dsDNA Buffer). Working solution is prepared for immediate use within 3 h.

4. Prepare the samples to be tested

4.1 Add 190 μL of 1× working solution into 0.5-mL tube, then add 10 μL of dsDNA Standard 1 and dsDNA Standard 2 to the corresponding standard PCR tube. Vortex gently for 2-3 sec and be careful not to create bubbles.

4.2 Add 180-199 μL of 1× working solution and 1-20 μL of each DNA samples to the appropriate 0.5-mL tube. The final volume of each sample in the tube is 200 μL. Vortex gently for 2-3 sec and be careful not to create bubbles.

5. Fluorescence Detection

5.1 Incubate the tube at room temperature in dark for 2 min.

5.2 According to the operating instructions of the Qubit® Fluorometer, select dsDNA High Sensitivity to measure the fluorescence signal value.

Notes

1. For your safety and health, please wear lab coats and disposable gloves for operation.
2. Qubit® is a trademark of ThermoFisher.
3. For research use only.