dsDNA HS Assay Kit

Cat.No.: HYD414

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	Concentration	100 rxn	500 rxn
dsDNA Reagent	200×concentrate in DMSO	250 μL	1250 μL
dsDNA Buffer	Not applicable	50 mL	250 mL
dsDNA Standard 1	0 ng/μL in TE buffer	1 mL	5×1 mL
dsDNA Standard 2	10 ng/μL in TE buffer	1 mL	5×1 mL

Storage

Store at 2-8 ℃ away from light for 1 year. Please avoid repeated freeze-thawing.

Instructions

1. Experimental Preparation

1) Equilibrate the components to room temperature before use.
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.

2. Prepare the working solution

1) 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 immediately use within 3 h.

3. Preparation of Test Samples

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.

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.

4. Fluorescence Detection

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

2) According to the operating instructions of the Qubit Fluorometer, select select 1×dsDNA High Sensitivity to measure the fluorescence signal value.

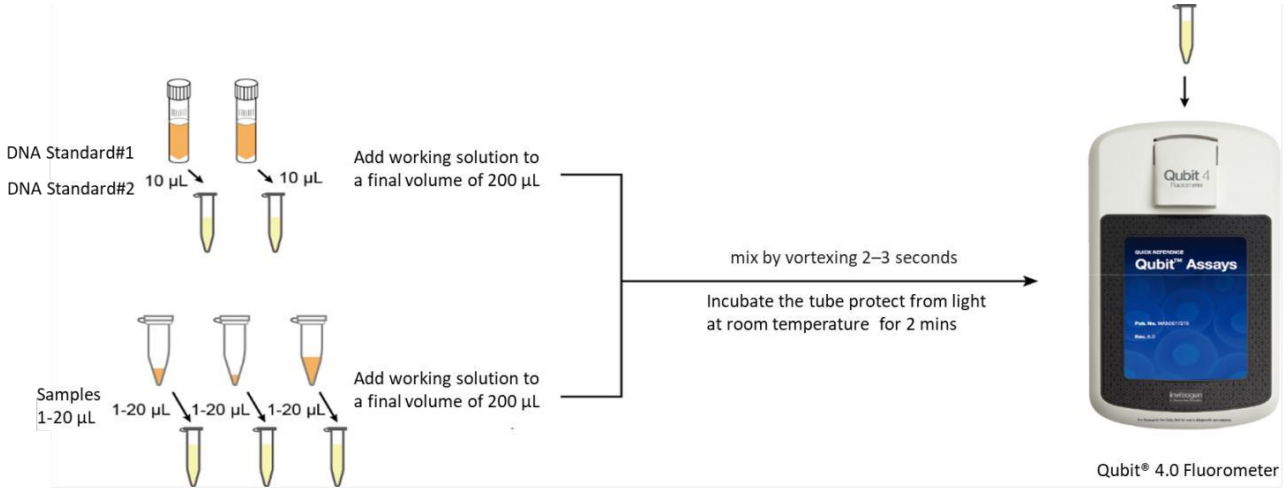


Figure 1. The operation workflow

Notes

1. For your safety and health, please wear lab coats and disposable gloves for operation.
2. This product is for research use only.