dsDNA BR Assay Kit

Cat.No.: HYD413

Product Description

dsDNA BR Assay Kit is a simple, sensitive, accurate and wide range fluorescence quantification kit for double-stranded DNA (dsDNA BR) with good linearity in the range of 2~1000 ng. The kit contains fluorescence detection reagent, buffer and related dsDNA BR standards. Before use, the fluorescence detection reagent is diluted into working solution with buffer, then the dsDNA sample to be measured is added, a standard curve is made, and readings are performed using a fluorescent enzyme marker or Qubit fluorometer. The product has good tolerance to conventional contaminants such as proteins and salts.

Components

Components	Concentration	100 rxn	500 rxn
dsDNA BR Reagent	200×concentrate in DMSO	250 μL	1.25 mL
dsDNA BR Buffer	Not applicable	50 mL	250 mL
dsDNA BR Standard 1	0 ng/μL in TE buffer	1 mL	5×1 mL
dsDNA BR Standard 2	100 ng/μL in TE buffer	1 mL	5×1 mL

Storage

Store at 2-8 ℃ away from light for 6 months. Please avoid repeated freeze-thawing.

Instructions

1. 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 BR Buffer to dilute the dsDNA BR Reagent to 1× (for example: take 1 μL of dsDNA BR Reagent and add 199 μL of dsDNA BR Buffer). Working solution is prepared for immediate 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 BR Standard 1 and dsDNA BR 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 dsDNA Broad Range (BR) assay to measure the fluorescence signal value.

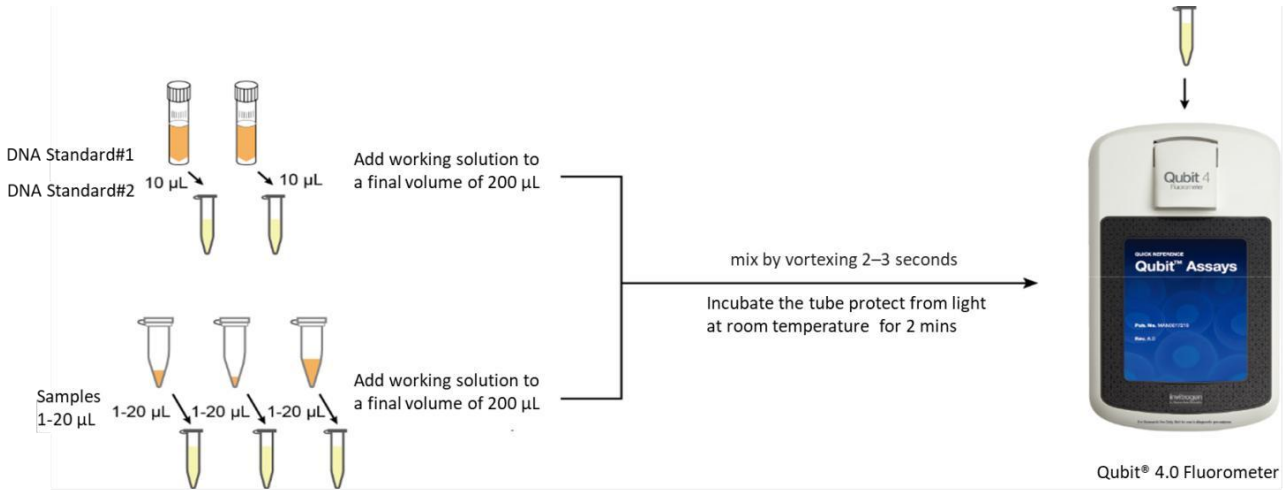


Figure 1. The operation workflow

Notes

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