ssDNA Assay Kit

Cat.No.: HYD412

Product Description

ssDNA Assay Kit is a simple, sensitive and accurate single strand DNA (ssDNA) fluorescence quantitative detection kit with good linear relationship between 1-200 ng. This kit contains fluorescence detection reagent,buffer solution and related ssDNA standards. Before use, dilute the buffer solution of fluorescence detection reagent into working solution, and then add the ssDNA sample to be tested, then use the fluorescence microplate or Qubit Read with a fluorometer. The selectivity of this kit to single stranded DNA is not higher than that to double stranded DNA, but it has good tolerance to conventional pollutants such as proteins, salts, detergents, etc.

Components

Components	Concentration	100 rxn	500 rxn
ssDNA Reagent	200× in DMSO	250 μL	1250 μL
ssDNA Buffer	Not applicable	50 mL	250 mL
ssDNA Standard 1	0 ng/μL in TE buffer	1 mL	5×1 mL
ssDNA Standard 2	20 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 ssDNA Buffer to dilute the ssDNA Reagent to 1× (for example: take 1 μL of ssDNA Reagent and add 199μL of ssDNA 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 ssDNA Standard 1 and ssDNA 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 ssDNA High Sensitivity to measure the fluorescence signal value.

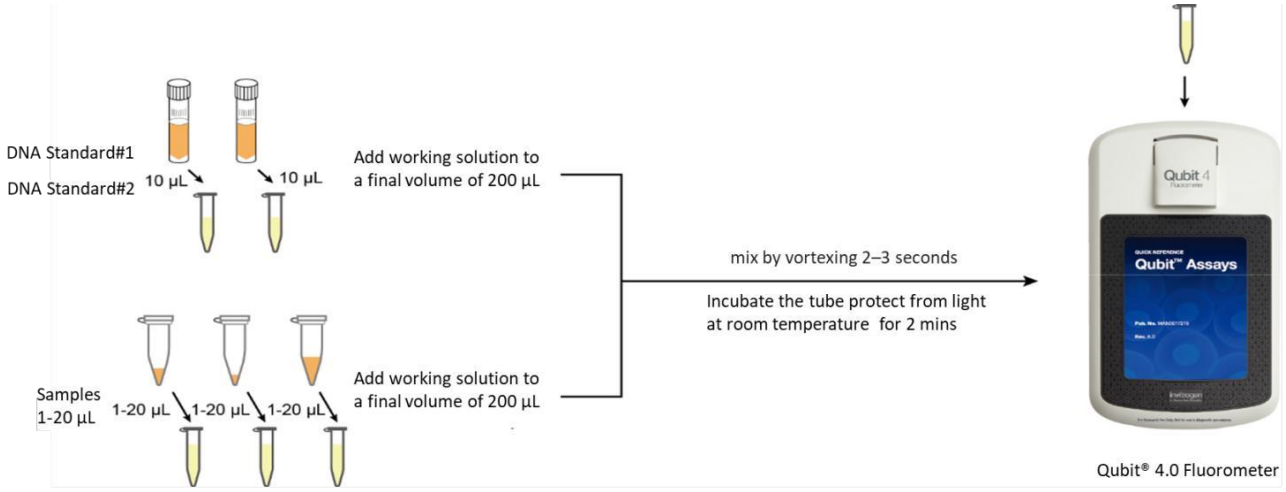


Figure 1. The operation workflow

Notes

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