

xQuant™ dsDNA HS Assay Kit Operating instruction

(Cat#QC001,Version1.4)

欣基（杭州）生物科技有限公司
WisGen BioSciences Co.,Ltd

For Research Use Only.

Not For Use in Diagnostic Procedures.

仅供科研使用

Table of Contents

Overview	1
Component	1
Storage conditions	1
Application scope	1
Note	2
Experiment Process	3

Overview

xQuant™ dsDNA HS Assay Kit make DNA quantitation easy and accurate, for the fluorescence quantitative detection of double-stranded DNA (dsDNA). This kit includes pre-mixed working solution (with fluorescent dye) and dsDNA standards. To perform the assay, simply dilute your sample (any volume from 1 ~ 20 μL is acceptable) into the 1 \times working solution provided, then read the concentration using a Qubit™ Fluorometer. It allows accurate quantification of dsDNA samples at concentration from 10 $\text{pg}/\mu\text{L}$ to 100 $\text{ng}/\mu\text{L}$. The fluorescent signal of this product is stable at room temperature for 3 hours, also has good tolerance for some conventional contaminants such as ssDNA, RNA , salts , free nucleotides , proteins , solvents , detergent , etc . It is easy to operate. Add the appropriate amount of sample directly to the working solution and detect by Qubit fluorometer.

Component

Name	Component	100 rxns (QC001-100)	500 rxns (QC001-500)	Storage	Expiry date
	xQuant 1 \times dsDNA HS Buffer	50 mL	250 mL	2~8 (!Preservation from light)	
xQuant™ dsDNA HS Assay Kit	xQuant 1 \times dsDNA HS Standard #1 (0 $\text{ng}/\mu\text{L}$)	1 mL	5 mL	2 ~ 8 $^{\circ}\text{C}$	Six Months
	xQuant 1 \times dsDNA HS Standard #2 (10 $\text{ng}/\mu\text{L}$)	1 mL	5 mL	2 ~ 8 $^{\circ}\text{C}$	

Recommend xQuant 1 \times dsDNA HS Standard #2 at -30 $^{\circ}\text{C}$ ~ -15 $^{\circ}\text{C}$ for long-term storage. Avoiding repeated freezing and thawing.

Storage conditions

Store at 2 ~ 8 $^{\circ}\text{C}$. Store xQuant 1 \times dsDNA HS Standard #2 at -30 $^{\circ}\text{C}$ ~ -15 $^{\circ}\text{C}$ for long-term storage. Avoiding repeated freezing and thawing.

Application scope

It is suitable for detection of 10 $\text{pg}/\mu\text{L}$ to 100 $\text{ng}/\mu\text{L}$ dsDNA samples.

Note

1. For research use only . Not for use in diagnostic procedures .
2. During the use of xQuant 1× dsDNA HS Buffer, to avoid contamination , please pipette enough amount into a centrifuge tube before use and then take the corresponding amount (180 ~ 199 μ L) from the tube for the experiment .
3. Please invert and mix the standards and samples before use to avoid uneven aspiration that may lead to biased results .
4. To ensure accurate quantification results, use a calibrated pipette .
5. 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 by hand for a long time to avoid light.
6. 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.

Experiment Process

- 1 . Use the Qubit™ fluorometer for dsDNA quantitative assay analysis.
- 2 . Prior to use, remove all components of the kit from 2 to 8 °C , equilibrium to room temperature and mix thoroughly.
- 3 . Prepare the Qubit tubes.
 - ! **Note: It is recommended to use 0.5 mL of Qubit™ fluorescent tubes: xQuant™ Tube (for Qubit) (Cat.No.QC001-R) or Thermo Qubit assay tubes (Cat.No. Q32856).**
4. Mark the cap of the Qubit tube to facilitate data recording.
 - ! **Note: Do not mark the wall of the tube as this may interfere with fluorescence signal acquisition.**
5. Add 10 μL each of xQuant 1× dsDNA HS Standard #1 and xQuant 1× dsDNA HS Standard #2 to two separate Qubit tubes.
6. Add 1 to 20 μL of the sample to be tested to the new Qubit tube.
 - ! **Note: For 1 to 2 μL sample adding , use a micro (P-2) pipette for best results.**
7. Add xQuant 1× dsDNA HS Buffer to the Qubit tube with the standard and the sample to make a final volume of 200 μL.
 - ! **Note: The final volume in each tube must be 200 μL. 190 μL of Qubit working solution should be added to the Qubit tube with the standard DNA and 180 ~ 199 μL of Qubit working solution to the Qubit tube with the sample.**
8. Cap the tube tightly and vortex shake to mix.
9. Centrifuge the tubes instantaneously and incubate all the Qubit tubes to be tested for 2 min at room temperature and keep them away from light.
10. Follow the operating instructions for the Qubit™ fluorometer and select the 1× dsDNA High Sensitivity assay to determine the fluorescence signal; read the standard value, generate a standard curve and then determine the concentration of the sample to be tested.

欣基（杭州）生物科技有限公司
WisGen BioSciences Co., Ltd

Add : 浙江省杭州市钱塘区福城路 400 号 6 幢 8 层
Service : order@wisgen.cn Web : www.wisgen.cn

