The Equalbit RNA HS Assay Kit

NB-54- 0028-01
NB-54-0028-02

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Cat# NB-54-0028-01

NB-54-0028-02

Introduction

The Equalbit RNA HS Assay Kit is a simple, sensitive, and accurate RNA fluorescence quantitative detection kit. This kit contains fluorescence detection reagents, buffers, and dsDNA standards. This kit is highly selective for RNA and is not subject to dsDNA. It has an excellent linearity between 5 ng and 100ng for RNA samples, providing accurate quantification of total RNA, rRNA, mRNA samples from 250 pg /µl to 100 ng /µl. This kit has excellent resistance for most conventional pollutants, including salt, free nucleotides, proteins, solvents, and detergents.
The Equalbit RNA HS Assay Kit is easy to operate, and the assay can be performed at room temperature. Before use, please dilute the fluorescence detection reagent with buffer into a working solution, and then add the RNA sample for detection by a Qubit® fluorometer.

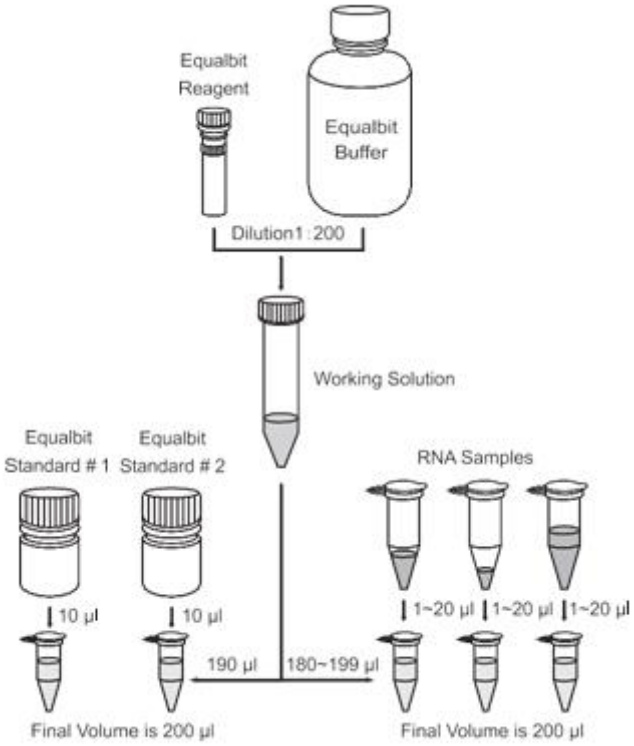
Contents of Kits

Components	NB-54-0028-01 (100 assays)	NB-54-0028-02 (500 assays)
Equalbit RNA HS Reagent (200 × in DMSO)	250 µl	1.25 ml
Equalbit RNA HS Buffer	50 ml	250 ml
Equalbit RNA HS Standard # 1 (0 ng/µl in TE buffer)	1 ml	5 ml
Equalbit RNA HS Standard # 2 (10 ng/µl in TE buffer)	4 × 250 µl	10 × 500 µl

Storage

The intact kit should be stored at 2-8℃ for up to 6 months. Protect from light and avoid repeated freeze-thaw cycles.
After the first use, it is recommended to store the Equalbit RNA HS Reagent at room temperature and protect from light, store the Equalbit RNA HS Buffer at room temperature, and store the Equalbit RNA HS Standard #1 and #2 at 4℃.
Transport condition: -20℃ ~25℃

Workflow review



Protocol

Note: This protocol is only suitable for Qubit® 2.0, Qubit® 3.0 and Qubit® 4.0 fluorimeters.

(1). Equilibrate all kit components to room temperature before use.
(2). Prepare sufficient 0.5 ml PCR tubes to accommodate all samples and standards.
Note: Only 0.5ml PCR tubes are suitable for detection. It is recommended to use Qubit® assay tubes (Cat. No. # Q32856) or Axygen® PCR-05-C tubes (Cat. No. # 10011-830).
(3). Label the lid of each tube. DO NOT label on the side wall, in order to avoid any possible interference in fluorescence signal acquisition.
(4). Prepare fresh working solution of Equalbit RNA HS Reagent, by diluting it in Equalbit RNA HS Buffer according to a ratio of 1:200. DO NOT use glass containers for the preparation of working solution.

Note: A sufficient amount of working solution should be prepared to accommodate all samples and standards. For example, to accommodate 7 RNA samples and 2 standards, it is needed to prepare 2 ml of working solution by adding 10 µl of Equalbit RNA HS Reagent to 1990 µl of Equalbit RNA HS Buffer. Mix thoroughly by vortexing.

(5). Prepare standards. Load 190 µl of working solution to each tube used for standards, then carefully add exactly 10 µl of Standard #1 and Standard #2 to the corresponding tube, respectively. Gently vortex for 2-3 sec to avoid bubbles. Make sure the exact pipetting of 10 µl.
(6). Prepare samples. For each tube used for samples, add 180 µl - 199 µl of working solution, and then carefully add 1 µl - 20 µl of RNA sample. Make sure the final volume in each tube is 200 µl. Gently vortex for 2-3 sec to avoid bubbles.
(7). Incubate at room temperature for 2 min. Protect from light.
(8). Load the sample tubes into a Qubit® Fluorometer and test the sample concentration by performing the RNA High Sensitivity Detection Program.

Application Notes

(1). Protect from light during storage to avoid quenching of fluorescent dyes.
(2). For all reagents and standards in this kit, please mix thoroughly before use by gently inverting tube. Centrifuge for 1-2 sec to collect the reagents to the bottom of tube.

(3). Carefully pipetting of exact volume is critical to ensure accurate quantification. Please use calibrated pipettes for the assay.
(4). Please perform the assay at room temperature. Equilibrate all kit components to room temperature before use. DO NOT hold the tubes for assay in hands for a long time.
(5). The working solution in Step 4 should be prepared fleshly and used within 3 hours, to avoid fluorescence quenching.
(6). To avoid degradation of RNA standards, use RNA-free consumables for the experiment and place the standards at 2-8 °C after the end of the experiment.