

EzQuant ssDNA Quantification Kit

Product Description

EzQuant ssDNA Quantitative Kit is ideal for quantitating ssDNA or oligonucleotides. It enables quick and accurate quantification of low-concentration samples from 50 pg/µl to 200 ng/µl when using with an EzCube fluorometer. The assay does not specifically recognize ssDNA but can also detect dsDNA and RNA. Nevertheless, the assay results will not be affected by common contaminants such as proteins, salts, and detergents.

Components

Material	Concentration	BRQK020-010000 (T00-FPBR01-00) 100 Assays
EzQuant ssDNA Buffer	Not applicable	50 ml *1
EzQuant ssDNA Reagent	200X in DMSO	250 µl *1
EzQuant ssDNA Standard #1	0 ng/µl in TE Buffer	1 ml *1
EzQuant ssDNA Standard #2	20 ng/µl in TE Buffer	1 ml *1

Note: For Research Use Only. Not for use in diagnostic procedures.

Shipping and Storage

All the components are shipped with ice pack and can be stored at 2 - 8 °C away from light for one year.

Required Material (not provided)

1. P2/P20/P200 Micropipette
2. Tips
3. 0.5 ml thin wall polypropylene tubes
4. 1.5 – 2 ml microcentrifuge tubes or 15/50 ml centrifuge tubes

Perform Assay Procedure

● Experimental preparation

1. Equilibrate the material to the room temperature before use.
2. Prepare enough 0.5 ml thin wall polypropylene tubes and label the tube lids.

EzQuant ssDNA Assay requires 2 standards.

Note: Please do not label the side wall of the tube as this could interfere with the collection of fluorescent signals.

3. Fresh prepare the **1X Working Solution** by diluting the **EzQuant ssDNA Reagent 1:200 in EzQuant ssDNA Buffer**.

For example, 2 standards and 5 samples, each tube requires about 200 μ l of working solution, so a total of ~1400 μ l is required. (7 μ l of EzQuant ssDNA Reagent + 1393 μ l EzQuant ssDNA Buffer)

● Prepare standards

1. Add **190 μ l of 1X Working Solution** to the appropriate tube.
2. Add **10 μ l of EzQuant ssDNA Standard #1** and **EzQuant ssDNA Standard #2** to the appropriate tube.
3. Vortex gently for 2-3 seconds and avoid creating air bubbles.

Note: If you do not need to establish a standard curve, you can skip this step.

● Prepare samples

1. Add **180 - 199 μ l of 1X Working Solution** to the appropriate tube.
2. Add **1 - 20 μ l of samples** to the appropriate tube such that the final volume is 200 μ l.
3. Vortex gently for 2-3 seconds and avoid creating air bubbles.

● Detection

1. Incubate at room temperature for 2 minutes in the dark.
2. Follow procedure appropriate for your instrument.

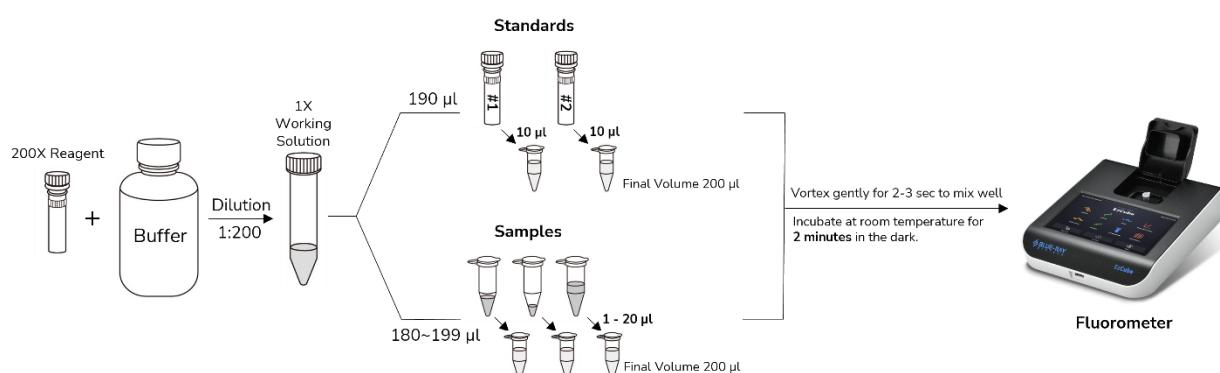


Figure 1. Workflow using EzQuant ssDNA Quantification Kit.

Table 1. Effects of contaminants on the results of EzQuant ssDNA Quantification Kit

Contaminant	Concentration in 10 µl sample	Detection Results
Ammonium sulfate	20 mM	OK
Sodium chloride	200 mM	OK
Ethanol	10%	OK
Triton X-100	0.1%	OK
Bovine serum albumin	1 mg/ml	OK
dNTPs	2 mM	OK
EDTA	2 mM	OK

Ordering Information

Catalog No.	Description
BRFP-0200	EzCube Fluorometer (Blue & Red)
BRFP-0300	EzCube Fluorometer (Blue, Red & Green)
BRQK011-010000	EzQuant 1X dsDNA HS Quantification Kit (100 Assays)
BRQK011-050000	EzQuant 1X dsDNA HS Quantification Kit (500 Assays)
BRQK020-010000	EzQuant ssDNA Quantification Kit (100 Assays)
BRQK031-010000	EzQuant RNA HS Quantification Kit (100 Assays)
BRQK100-050000	0.5 ml Thin Wall PCR Tube

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