

# RESAZURIN BASED CELL VIABILITY ASSAY

## KC04002-1250/5000 Tests

### DESCRIPTION AND USE

The Resazurin Based Cell Viability Assay procures a fluorometric method for calculating the number of viable cells present in multiwell plates. It uses the indicator dye resazurin to measure the metabolic capacity of cells (an indicator of cell viability). Viable cells preserve the ability to reduce resazurin into resorufin, which is highly fluorescent.

### MATERIALS SUPPLIED

Item	No. Tests	Quantity
BQC Cell Blue Viability Reagent	1250	1-25 mL
	5000	1-100 mL

### STORAGE AND STABILITY

On receipt store kit components at 4 °C indicated above. Do not use after the expiration date stated on the packaging.

### RELATED PRODUCTS

Product	Reference
MTT-B Cell Proliferation Assay	KF03001B
MTT-A Cell Proliferation Assay	KF03001A
DNA Quantification Kit – Hoechst Assay	KC04003

### ASSAY PROTOCOL

- Set up 96-well assay plates containing cells in culture medium
- Perform the experiment under study  
Add **20 µL/well of BQC Cell Blue Viability Reagent**
- NOTE:** If you use a different size of plates, add a 20% of the initial volume of culture medium
- Mixture during 15 seconds  
Incubate using standard cell culture conditions for 1-4 hours
- NOTE:** Take into account that extended incubation periods may be used for some applications
- Shake the plate for 15 seconds and measure the fluorescence of the plate:  $\lambda_{excitation}$ : 560 nm,  $\lambda_{emission}$ : 590 nm

### DATA ANALYSIS

Subtract the average of fluorescence values of the culture medium background from all fluorescence values of experimental wells (optional).

- NOTE:** Fluorescence can be stopped and stabilized adding 3% of SDS.

The % reduction of BQC Cell Blue Viability Reagent for each case is calculated by using the formula:

$$\% \text{ Reduction} = \frac{(F_x - F_{\text{control}})}{F_{\text{control}}}$$

where  $F_x$  is the fluorescence signal of the sample and  $F_{\text{control}}$  is the signal from the control (the culture medium supplemented with 20% vol BQC Cell Blue Viability Reagent)

#### FOR RESEARCH USE ONLY