ELISA PRODUCT INFORMATION & MANUAL

Quick Cell Viability Assay Kit (Fluorometric)

NBP2-54886

Enzyme-linked Immunosorbent Assay for quantitative detection. For research use only.
Not for diagnostic or therapeutic procedures.

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ab102501 Quick Cell Viability Assay Kit (Fluorometric)

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1. Overview

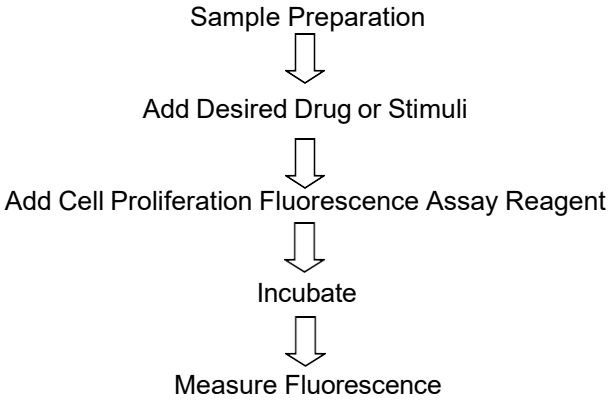
Novus Biologicals's Quick Cell Viability Assay Kit (Fluorometric) provides by far the most sensitive and easiest means for quantifying cell proliferation and viability. Simply add the single reagent to cell culture, incubate and read the fluorescence intensity.

The assay utilizes the redox dye resazurin which is not fluorescent, but upon reduction by viable metabolically active cells, the dye becomes highly fluorescent (Ex = 530-570 nm; Em = 590-620 nm). Therefore, viable metabolically active cells can be easily measured.

Key features include:

1. **Simple procedure:** Just Add-Incubate-Read. No washing, No solubilization.
2. **Highly Sensitive:** Detect as few as 100 cells.
3. **Large linear assay range:** Detect from 100 to 100000 cells per well.
4. **Longer Stability:** Reagent is stable at -20°C for at least a year.
5. **Very safe:** Non-radioactive, non-toxic, and cells can be further used for other experiments.
6. **Wide applications:** Used in studying a variety of growth stimulations or inhibitions (e.g., by growth factors, cytokine, nutrients, anticancer drugs, apoptosis inducers/inhibitors, toxicity inducing chemicals, etc.).

2. Protocol Summary



3. Components and Storage

A. Kit Components

Item	Quantity
Cell Proliferation Fluorescence Assay Reagent	5 mL

Store the reagent at -20°C, stable for 1 year, protect from light. Read the entire protocol before performing the assay.

B. Additional Materials Required

- Microcentrifuge
- Pipettes and pipette tips
- Fluorescent microplate reader or fluorometer
- 96-well plate
- Orbital shaker

4. Assay Protocol

Note: The assay can be performed in any type of culture plates, adjust the Cell Proliferation Fluorescence Assay Reagent amount to 10% of culture medium. Duplicate or triplicate assays are recommended. Phenol red or serum does not interfere with the assay.

1. Plate cells (1-50 x 10^4/well) in a 96-well microtiter plate in a final volume of 100 µl/well culture medium. For toxicity assays, use more cells to start with (e.g., 1-5 x 10^5 cells/well).

Notes:

a) The optimal cell number used for the assay may vary among cell types. For best results, it is recommended to add various numbers of cells in your initial assay to determine the optimal cell number to be used.

b) We recommend performing a reagent fluorescence background control by using the same amount of culture medium and Cell Proliferation Fluorescence Assay Reagent without any cells.

2. Treat cells with your stimuli or drug for desired period of time (e.g. 12-96 hours).

Note:

Drugs or compounds should be dissolved in PBS or culture medium, otherwise perform a proper solvent control if compound is dissolved in other solvents.

3. Accurately add 10 µl (10% medium volume) Cell Proliferation Fluorescence Assay Reagent into each well, mix well gently. Be careful not to introduce bubbles to the wells.

4. Incubate the plate for 1-5 hours in standard culture conditions.

Note:

Incubation time is dependent on cell type and cell number used. You may read the plate multiple times as desired and choose the best reading results.

5. Measure fluorescence intensity on a fluorescence plate reader, or fluorometer at Ex = 530-570 nm, Em = 590-620 nm.