

# VisionBlue™ Quick Cell viability fluorometric assay kit

(Catalog #K303-500, -2500; Store at -20°C)

## I. Introduction:

The VisionBlue™ Quick Cell Proliferation Assay Kit 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 VisionBlue™ 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:

- Simple procedure:** Just Add-Incubate-Read. No washing, No solubilization.
- Highly Sensitive:** Detect as few as 100 cells.
- Large linear assay range:** Detect from 100 to 100000 cells per well.
- Longer Stability:** Reagent is stable at -20°C for at least a year.
- Very safe:** Non-radioactive, non-toxic, and cells can be further used for other experiments.
- 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.).

## II. Kit Contents:

## III. General considerations:

Components	K303-500-1	K303-2500-1
	500 Assay	2500 Assay
VisionBlue™ Reagent	5 ml	25 ml

- Phenol red or serum does not interfere with the VisionBlue™ assay.
- The assay can be performed in any type of culture plates, adjust the VisionBlue™ reagent amount to 10 % of culture medium. Duplicate or triplicate assays are recommended.
- Drugs or compounds should be dissolved in PBS or culture medium, or perform proper solvent control if compound is dissolved in other solvents.

## IV. Reagent Storage and handling:

Store the reagent at -20°C, stable for 1 year, protect from light. For research use only!

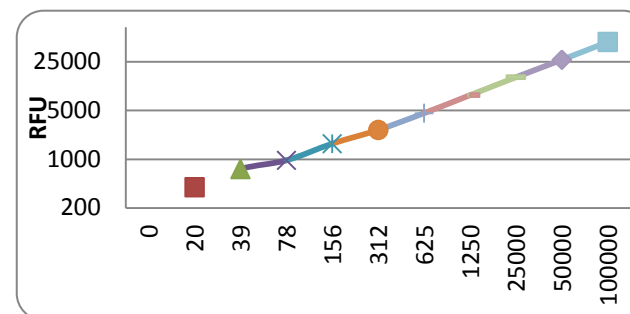
## V. Cell Proliferation Assay Procedures:

- Plate cells (1 – 50 x 10<sup>4</sup>/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<sup>5</sup> cells/well).  
**Notes:** 1) 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.  
2) We recommend performing a reagent fluorescence background control by using the same amount of culture medium and VisionBlue™ Reagent without any cells.
- Treat cells with your stimuli or drug for desired period of time (e.g. 12 - 96 hours).
- Accurately add 10 µl (10 % medium volume) VisionBlue™ Reagent into each well, mix well gently. Be careful not to introduce bubbles to the wells.

- 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.

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



## RELATED PRODUCTS:

- Apoptosis Detection Kits & Reagents
  - Annexin V, Caspase, MitoCapture, DNA Fragmentation Kits & Reagents
  - Apoptosis Inducers and Apoptosis siRNA Vectors
- Cell Fractionation System
  - Mitochondria/Cytosol/Nuclear/Membrane Fractionation Kits
  - Mammalian Cell Extraction Kit
- Cell Proliferation & Senescence
  - Quick Cell Proliferation & Viability Assay Kits
  - Senescence Detection Kit
  - LDH-Cytotoxicity Assay Kit
  - Live/Dead Cell Staining Kit
- Cell Damage & Signaling Pathway Assays
  - HDAC, HAT, cAMP, cGMP, Secrease, Kinase, Phosphatase Assay Kits
  - DNA Damage Quantification Kit
  - Glutathione, GST, & Nitric Oxide Fluorometric & Colorimetric Assay Kits
- Metabolism Assays
  - Glucose, Sucrose, Galactose, Lactose, Maltose, Fructose Assay Kits
  - Lactate, Pyruvate, Uric Acid, Ethanol, Ascorbic Acid Assay Kits
  - Amino Acids, Choline, Hemin, Sarcosin, Creatine, Creatinine Assay Kits
  - NAD/NADH, NADP/NADPH, ADP/ATP Ratio Assay Kits
- Cholesterol & Obesity Assays
  - Cholesterol, HDL, LDL/VLDL, Triglyceride Assay Kits
  - CETP & PLTP Assay Kits
  - Adiponectin, Resistin, Leptin, & Visfatin Assay Kits
- Protein A/G/L and Conjugates
- EGFP/RFP/YFP/CFP Vectors, Proteins and Antibodies

**FOR RESEARCH USE ONLY! Not to be used on humans.**