

## **SRB Viability/Cytotoxicity Assay Kit (4000 assays)**

**Cat. No. VB-4000L**

### **Introduction**

SRB Viability/Cytotoxicity Assay Kit is a colorimetric assay based upon the quantitative staining of cellular proteins by sulforhodamine B (SRB). The SRB assay provided a better linearity with cell number and a higher sensitivity. Cell debris is not stained by SRB, therefore the sensitivity of SRB assay for cytotoxicity detection is not affected by cell debris. This assay is accurate, simple, reliable and reproducible. It has been widely used in cytotoxicity and cell viability studies.

### **Kit Components (for 4000 assays)**

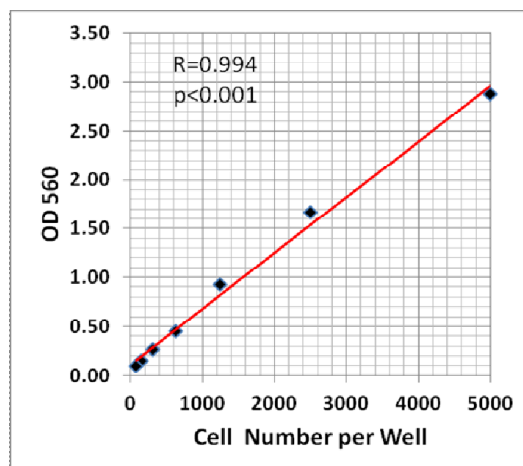
1. 1× fixation solution 240 mL
2. 1× SRB staining solution 240 mL
3. 10× dye wash solution 240 mL
4. 1× dye solubilization solution 240 mL

### **Storage**

Store at 4 °C.

### **Material Needed But NOT Supplied with the Kit**

1. 96 well tissue culture plats
2. Microplate reader



**Quantitation of BEAS2B cells using SRB Viability/Cytotoxicity Assay Kit.** Cells in the parent culture were counted in a hemacytometer and then diluted to the indicated cell numbers in 200  $\mu$ L volumes, seeded to the wells of a 96-well microplate and incubated for 6 hours before being assayed. Absorbance measurements at 560nm were made using a microplate reader. Each data point represents the mean value of 6 samples.

## Preparation before Starting

Dilute the 100 mL of 10× dye wash solution by adding 900 mL distilled water.

## Protocol

1. Cells are grown in a 96-well plate in 200  $\mu$ L growth medium.

**Note:** In general, 100 - 5000 cells per well are acceptable for detection.

2. Without removing the cell culture supernatant, gently add 50  $\mu$ L cold 1× fixation solution to each well, and incubate the plates at 4 °C for 1 h.

**Note:** The plates should be disturbed as little as possible during and after fixation solution step. Do not inject the water stream directly onto the bottom of the wells, as this can cause the cell monolayer to detach.

3. Wash five times with tap water after fixation.

4. Cells are stained by addition of 50  $\mu$ L/well of 1× SRB staining solution at room temperature for 30 min, and rinsed four times with 200  $\mu$ L (each time) of 1× dye wash solution to remove unbound dye.

**Note:** It is very important to rinse the plates several times, and the rinses should be carried out as quickly as possible

5. SRB was solubilized in 50  $\mu$ L of 1× dye solubilization solution for 5 min with agitation,
6. Measure absorbance at 560 - 580 nm read with a microplate reader.

**Note:** This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals. Avoid contact with eyes, skin and clothing. Do not ingest. Wear gloves.