Specifications and Use

Description
- Resazurin is a non-toxic, water soluble, redox-sensitive dye that changes from its blue/non-fluorescent state to pink/highly-fluorescent upon reduction to resorufin. Resazurin added to viable cells can become reduced via an as yet unknown mechanism by enzymatic or chemical reactions in the cell. Resazurin can be utilized in a simple and quantitative method for measuring cell proliferation, viability and cytotoxicity.

Formulation
- Supplied as 100 mL of a ready to use solution in a 0.2 μm filtered, buffered solution.

Storage
- Light sensitive. Stable at 2° - 8° C for 12 months.

Directions for Use
- Resazurin may be added at any time during the culture period. For measurement of cell proliferation, it is best to add Resazurin during log phase growth. Aseptically pulse using a volume equal to 10% of the cell culture volume. Return cells to the incubator and continue the incubation for about 4 hours. Incubation times may vary depending on the metabolic rates of the cell lines being tested.
- Fluorescence can be read using 544 nm excitation and 590 nm emission wavelength.
- Absorbance can be read using a spectrophotometer set at 570 nm. If wavelength correction is available, set to 600 nm.

References

Typical Data

Correlation between Cell Number and Absorbance of Resorufin

Correlation between Cell Number and Relative Fluorescence Units of Resorufin

Figure 1: Detection of Bal/3 CCR2A cell growth using Resazurin (read in a spectrophotometer).

Figure 2: Detection of Bal/3 CCR2A cell growth using Resazurin (read in a fluorescent plate reader).

FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.