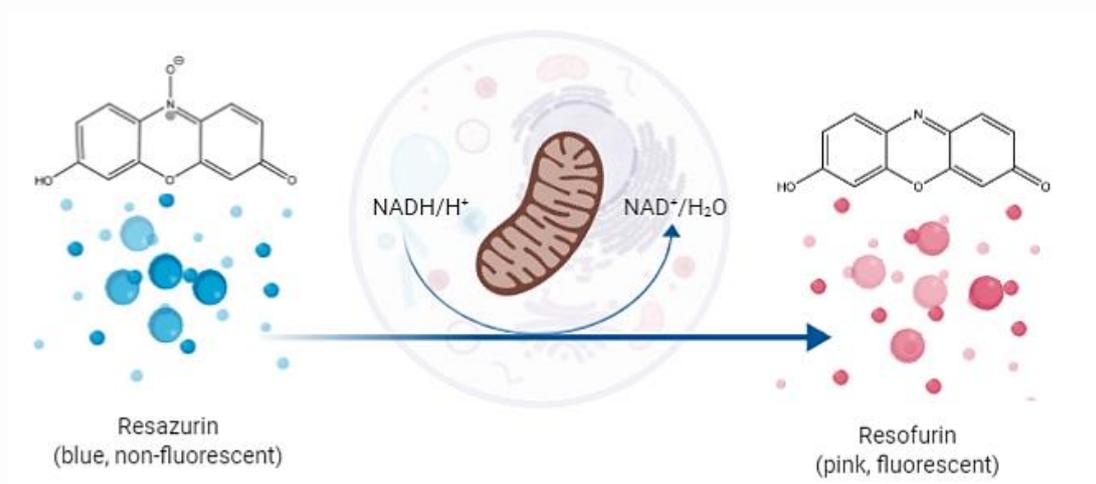


# Resazurin Cell Viability Assay

RESC-001-2K5

## Introduction

The Resazurin cell viability assay is a fluorescent assay that detects cellular metabolic activity. The kit offers a simple, rapid, reliable, sensitive, safe and cost-effective measurement of cell viability. Resazurin (7-Hydroxy-3H-phenoxazin-3-one 10-oxide) is a blue dye non-fluorescent until it is irreversibly reduced to the pink coloured and highly red fluorescent resorufin by dehydrogenase enzymes in metabolically active cells. The fluorescent signal is monitored using 530-560 nm excitation wavelength and 590 nm emission wavelength. The absorbance is monitored at 570 nm and 600 nm. The fluorescent or colorimetric signal generated from the assay is proportional to the number of living cells in the sample.



## Storage

Resazurin solution should be stored at  $-20^\circ\text{C}$  in the dark for long term storage. Thaw Resazurin solution completely and mix thoroughly before use. The product is stable for at least 10 freeze-thaw cycles. It can be stored at  $4^\circ\text{C}$  in the dark for up to 12 months.

## Product use limitation

This product is developed, designed and sold exclusively for research purposes and use only. The product is not intended for diagnostics or drug development, nor is it suitable for administration to humans or animals.

## Protocol

1. Thaw out Resazurin solution (if kept frozen) and warm it to 37°C to ensure all components are completely in solution.
2. Plate cells into 96-well tissue culture plates using optimal cell concentration.
3. Carry out your experiment by adding agents of your interest into appropriate well and incubate with cells for a certain period of time.
4. Add Resazurin solution to plate (10% of the initial volume in the well). Return cells to the incubator and continue the incubation at for least 1 hour and up to 24 hours at 37°C (Incubation times may vary depending on the metabolic rates of the cell lines being tested).
5. Measure absorbance at 570 nm (If wavelength correction is available, set to 600 nm) or fluorescence with excitation  $E_x=530-570$  nm and emission  $E_m=590-620$  nm using a micro-titer plate reader.