Glowing products for science

Call us : 800-304-5357

Resazurin (alamarBlue™), Sodium Salt

Resazurin (also known as alamarBlue™) is the N-oxide of the fluorescent dye resorufin and is useful for detecting reductive activities in cells. It has been widely used for measuring cell proliferation (1,2) and mitochondrial metabolic activity. Resazurin itself is non-fluorescent until it is reduced to the highly red fluorescent resorufin ($\lambda_{Ex}/\lambda_{Em}$: 563/587 nm).

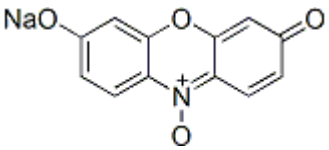
Product attributes

CAS number	62758-13-8
Excitation/Emission	563/587 nm (end product)

Product Description

Resazurin (also known as alamarBlue™) is the N-oxide of the fluorescent dye resorufin and is useful for detecting reductive activities in cells. It has been widely used for measuring cell proliferation (1,2) and mitochondrial metabolic activity. Resazurin itself is non-fluorescent until it is reduced to the highly red fluorescent resorufin ($\lambda_{Ex}/\lambda_{Em}$: 563/587 nm). Usually, NADPH or NADH is the reductant that converts resazurin to resorufin in the presence of diaphorase as the enzyme. Thus, resazurin can be used to detect NADH, NADPH, or diaphorase levels. Furthermore, the resazurin/diaphorase/NADPH system can be used to detect any biochemical or enzyme activity that is involved in a biochemical reaction generating NADH or NADPH (3-9). Although resazurin is available from most of the chemical suppliers, a trace amount of resorufin contaminant often makes the material unsuitable for bioassay applications. We supply a high grade resazurin that has a minimal background fluorescence. Please also see our ready-to-use Resazurin Cell Viability Assay Kit (30025).

- $\lambda_{Ex}/\lambda_{Em}$ (pH 9) = 604 nm/none
- $\lambda_{Ex}/\lambda_{Em}$ (reduced form): 563/587 nm
- Dark solid soluble in DMSO or water
- Store at 4°C and protect from light
- $C_{12}H_6NNaO_4$
- MW: 251.17



References

1. J Ocular Pharmacol Therapeut 26, 1 (2010).
2. J Clin Lab Anal 9, 89 (1995).
3. J Immunol Methods 175, 181 (1994).
4. J Anal Toxicol 8, 273 (1984).
5. Clin Chem 29, 171 (1983).
6. Clin Chim Acta 107, 149 (1980).
7. Clin Chem 26, 61 (1980).
8. Biochem Biophys Acta 484, 249 (1977).