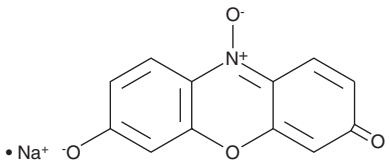
PRODUCT INFORMATION

Resazurin (sodium salt)

Item No. 14322

CAS Registry No.:	62758-13-8
Formal Name:	7-hydroxy-3H-phenoxazin-3-one-10-oxide, monosodium salt
MF:	$C_{12}H_6NO_4 \bullet Na$
FW:	251.2
Purity:	≥85%
UV/Vis.:	λ_{max}: 228, 288, 379, 610 nm
Ex./Em. Max:	570/580 nm
Supplied as:	A crystalline solid
Storage:	Room temperature
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Resazurin (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the resazurin (sodium salt) in the solvent of choice. Resazurin (sodium salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of resazurin (sodium salt) in these solvents is approximately 0.5 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of resazurin (sodium salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of resazurin (sodium salt) in PBS, pH 7.2, is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Resazurin is a blue non-fluorescent dye that when reduced to the highly red-fluorescent product resorufin (ex/em max = 570/580 nm, respectively) can be used as a quantifiable detection agent for enzyme activity assays.[1,2] The nonfluorescent resazurin can be used as an oxidation-reduction indicator in cell viability assays in a variety of cells.[1]

References

1. O'Brien, J., Wilson, I., Orton, T., *et al.* Investigation of the Alamar Blue (resazurin) fluorescent dye for the assessment of mammalian cell cytotoxicity. *Eur. J. Biochem.* **267(17)**, 5421-5426 (2000).
2. Mayer, R.T., Jermyn, J.W., Burke, M.D., *et al.* Methoxyresorufin as a substrate for the fluorometric assay of insect microsomal O-dealkylases. *Pestic. Biochem. Physiol.* **7(4)**, 349-354 (1977).

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