
Product Data Sheet

Product Name: Resorufin sodium salt (NSC 12097 sodium salt)

Cat. No.: GC33591

Chemical Properties

Cas. No. 34994-50-8

SMILES O=C1C=CC2=NC3=C(OC2=C1)C=C(C=C3)O[Na]

Formula C12H6NNaO3 M.Wt 235.17

Solubility Water : 10 mg/mL Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

Background

Resorufin is a fluorescent probe and the reduced form of the redox indicator dye resazurin.¹ It can be further reduced to hydroresorufin, which is non-fluorescent.

Resorufin has been used in the synthesis of resorufin-based fluorescent probes.^{2,3} It has also been used for the direct measurement of solvent-solute hydrogen bond dynamics with distinct absorption and emission peaks in solvents with strong hydrogen bonds and overlapping peaks in solvents with weak hydrogen bonds.⁴ It displays excitation/emission maxima of 570/580 nm, respectively.

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)

3.Yoon, J.W., Kim, S., Yoon, Y., et

al. A resorufin-based fluorescent turn-on probe responsive to nitroreductase activity and its application to bacterial detection *Dyes Pigm.* 171107779(2019)

4.Yu, J., and Berg, M. Resorufin as a probe for the dynamics of solvation by hydrogen bonding *Chem. Phys.*

Caution: Product has not been fully validated for medical applications. For research use only.

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Lett.208(3-4)315-320(1993)

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