Resazurin Sodium Salt

Cat: IR1380

Storage: RT, 2 years (protect from light)

Introduction

Resazurin is an N-oxidized small molecule derivative of dihydroxyphenoxazinone, a nonionic dye. Resazurin is a redox indicator that changes from blue-violet to pink to colorless upon reaction. It is also used as a pH indicator in the range of 3.5-6.5, changing from orange to blue-violet in color. Reduction of resazurin sodium results in the formation of red fluorescent tryhalin (hydroxyphenoxazinone), which is further reduced to form colorless hydrogenated tryhalin. Resazurin sodium salt has been used as a simple and versatile method of measuring cell proliferation and cytotoxicity.

Parameter

CAS: 62758-13-8

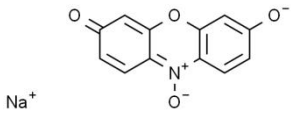
Molecular Formula: $C_{12}H_6NNaO_4$

Molecular Weight: 251.17

Purity: ≥90%

Appearance: Green to black Solid

Solubility: Soluble in Water ≥10mg/mL



Dissolution Preparation Chart (*only for reference*)

Prepare a 10 mM stock solution in ultrapure water. For example, 1 mg of resazurin sodium powder is dissolved in 0.3981 mL of ultrapure water.

Mass / Solvent / Concentration	1mg	5mg	10mg
1mM	3.9814mL	19.9068mL	39.8137mL
5mM	0.7963mL	3.9814mL	7.9627mL
10mM	0.3981mL	1.9907mL	3.9814mL

Note

1. When it is found to be difficult to dissolve, it can be properly sonicated to promote dissolution.
2. The final concentration of the working solution is recommended to be optimized according to different cell lines and experimental systems.
3. For your safety and health, please wear lab coat and disposable gloves.
4. This product is for scientific research use only. Do not use in medicine, clinical diagnosis or treatment, food and cosmetics. Please do not store in ordinary residential areas.

Related Literature

[1]. Zhang A, et al. Targeting and arginine-driven synergizing photodynamic therapy with nutritional immunotherapy nanosystems for combating MRSA biofilms. Sci Adv. 2023 Jul 14;9(28):eadg9116. doi: 10.1126/sciadv.adg9116. Epub 2023 Jul 14. PMID: 37450586; PMCID: PMC10348676.（IF：13.6）

[2]. Li Z, et al. The STING-mediated antiviral effect of fucoidan from Durvillaea antarctica. Carbohydr Polym. 2024 May 1;331:121899. doi: 10.1016/j.carbpol.2024.121899. Epub 2024 Feb 1. PMID: 38388047.（IF：11.2）

Note: For more literature, please visit the Solarbio official website.