

## Roseoflavin

## Chemical Properties

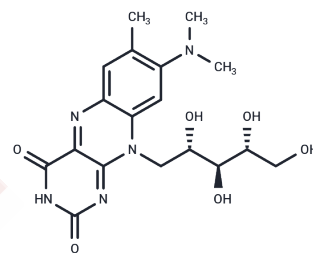
CAS No. : 51093-55-1

Formula: C<sub>18</sub>H<sub>23</sub>N<sub>5</sub>O<sub>6</sub>

Molecular Weight: 405.41

Storage: Store at low temperature, Keep away from moisture  
Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



## Biological Description

Description	Roseoflavin, a chemical analog of FMN and riboflavin that has antimicrobial activity, can directly bind to FMN riboswitch aptamers and downregulate the expression of an FMN riboswitch-lacZ reporter gene in <i>B. subtilis</i> .
Targets(IC50)	Antibacterial

## Solubility Information

Solubility	DMSO: 55 mg/mL (135.67 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	---

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4666 mL	12.3332 mL	24.6664 mL
5 mM	0.4933 mL	2.4666 mL	4.9333 mL
10 mM	0.2467 mL	1.2333 mL	2.4666 mL
50 mM	0.0493 mL	0.2467 mL	0.4933 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Landwehr W, et al. Taxonomic analyses of members of the *Streptomyces cinnabarinus* cluster, description of *Streptomyces cinnabarigriseus* sp. nov. and *Streptomyces davaonensis* sp. nov. *Int J Syst Evol Microbiol.* 2018 Jan; 68(1):382-393.

Chen J, et al. Finding the Needle in the Haystack-the Use of Microfluidic Droplet Technology to Identify Vitamin-Secreting Lactic Acid Bacteria. *MBio.* 2017 May 30;8(3). pii: e00526-17.

Krajewski SS, Ignatov D, Johansson J. Two Are Better Than One: Dual Targeting of Riboswitches by Metabolite Analogs. *Cell Chem Biol.* 2017 May 18;24(5):535-537.

Lee ER, et al. Roseoflavin is a natural antibacterial compound that binds to FMN riboswitches and regulates gene expression. *RNA Biol.* 2009;6(2):187-194.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481