Product Data Sheet

Roseoflavin

Cat. No.: HY-121295 CAS No.: 51093-55-1 Molecular Formula: $C_{18}H_{23}N_5O_6$

Molecular Weight: 405.41

Target: Bacterial

Pathway: Anti-infection

Storage: -20°C, sealed storage, away from moisture and light

* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture

and light)

SOLVENT & SOLUBILITY

In Vitro

DMSO: 50 mg/mL (123.33 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	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

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description	Roseoflavin, a natural pigment originally isolated from Streptomyces davawensis, is an antimetabolite analog of Riboflavin and flavin mononucleotide that has antimicrobial properties $^{[1]}$.
In Vitro	Roseoflavin, a chemical analog of flavin mononucleotide (FMN) and riboflavin that has antimicrobial activity, can directly bind to FMN riboswitch ($K_d \sim 100$ nM) aptamers and downregulate the expression of an FMN riboswitch-lacZ reporter gene in B. subtilis ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. 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.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

Tel: 609-228-6898 Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Page 2 of 2 www.MedChemExpress.com