Product Information

Roseoflavin
Item No. 16001

CAS Registry No.: 51093-55-1
Formal Name: 8-demethyl-8-(dimethylamino)-riboflavin
Synonym: 8-Dimethylaminoriboflavin
MF: C18H23N5O6
FW: 405.4
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_max: 219, 259, 491 nm

Laboratory Procedures

For long term storage, we suggest that roseoflavin be stored as supplied at -20°C. It should be stable for at least two years.

Roseoflavin is supplied as a crystalline solid. A stock solution may be made by dissolving the roseoflavin in the solvent of choice. Roseoflavin is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of roseoflavin in these solvents is approximately 10 and 0.3 mg/ml, respectively.

Roseoflavin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, roseoflavin should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Roseoflavin has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Roseoflavin is an analog of flavin mononucleotide (FMN) and riboflavin that is synthesized by the soil bacterium S. davawensis and possesses antimicrobial activity.¹ It has been shown to bind directly to FMN riboswitch aptamers (K_D = ~100 nM), downregulating the expression of genes responsible for the synthesis and transport of riboflavin.²

References


Related Products

For a list of related products please visit: www.caymanchem.com/catalog/16001

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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