

PRODUCT DATA SHEET

Code No.: BIA-R1535

Pack sizes.: 1mg, 5mg

Synonyms:

8-Dimethylaminoriboflavin, Roseoflavine

Specifications

CAS # : **51093-55-1**

Molecular Formula : C18H23N5O6

Molecular Weight : 405.4

Source :-

Appearance : Red solid

Purity : >98% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

Roseoflavin is an antibacterial pigment isolated from Streptomyces davawensis as an anti-metabolite of riboflavin. Roseoflavin is used as a substrate to mimic riboflavin in flavin biosynthesis, but leading to the formation of inactive flavin co-factors. More recently, roseoflavin has been shown to be an important regulator of bacterial gene expression by binding to untranslated regions of RNA, so-called ribo-switching sites.

References

- 1. Roseoflavin, a new antimicrobial pigment from Streptomyces. Otani S. et al., J. Antibiot. 1994, 27, 86.
- 2. The bifunctional flavokinase/flavin adenine dinucleotide synthetase from Streptomyces davawensis produces inactive flavin cofactors and is not involved in resistance to the antibiotic roseoflavin. Grill S. et al., J.

Bacteriol. 2008, 190, 1546.

3. Riboswitches as antibacterial drug targets Blount K.F. & Breaker R.R.: Nat. Biotechnol. 2006, 24, 1558.