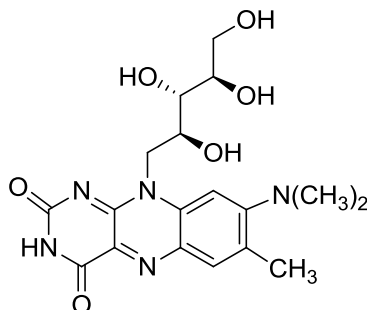


## Roseoflavin

Code No.: **BIA-R1535**

Pack sizes: **1 mg, 5 mg**



Synonyms : 8-Dimethylaminoriboflavin, Roseoflavine

## Specifications

CAS #	: 51093-55-1
Molecular Formula	: C <sub>18</sub> H <sub>23</sub> N <sub>5</sub> O <sub>6</sub>
Molecular Weight	: 405.4
Source	: <i>Streptomyces</i> sp.
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.

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