

## PRODUCT DATA SHEET

Code No.: BIA-C1624

Pack sizes: 1 mg, 5 mg

Synonyms : SF 2738A

## Specifications

Collismycin

CAS # : 158792-24-6 Molecular Formula :  $C_{13}H_{13}N_3O_2S$ 

Molecular Weight : 275.3

Source : Streptomyces sp.

Appearance : White to off white solid

Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO.

## Application Notes

Collismycin is a rare and unusual antibiotic belonging to the caerulomycin class, containing a core 2,2'-bispyridyl with an oxime substituent, produced by a strain of Streptomyces and discovered by researchers from Kirin, Japan in 1994. Collismycin was discovered as a potent inhibitor of glucocorticoid receptor binding. Collismycin has weak to moderate activity against bacteria, fungi and tumor cell lines. More recently, collismycin has been found to be a potent and selective neuroprotective agent against oxidative stress. Other recent publications have focused on the biosynthesis of collismycin as a route to the production of related analogues.

## References

- 1. Caerulomycin, a new antibiotic from Streptomyces caeruleus Baldacci: I. Production, isolation, assay and biological properties. Funk A. & Divekar P.V. Can. J. Microbiol. 1959, 5, 317.
- 2. Collismycin A and B, novel non-steriodal inhibitors of dexamethasone glucocorticoid receptor binding. Shindo K. et al. J. Antibiot. 1994, 47, 1072.
- 3. Engineering the biosynthesis of the polyketide-nonribosomal peptide collismycin A for generation of analogs with neuroprotective activity. Garcia I. et al. Chem Biol. 2013, 20, 1022.
- 4. Collismycin A biosynthesis in Streptomyces sp. CS40 is regulated by iron levels through two pathway-specific regulators. Vior N.M. et al. Microbiology 2014, 160, 467.

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