

Product Name:	Collismycin
Product Number:	C181
CAS Number:	158792-24-6
Molecular Formula:	$C_{13}H_{13}N_3O_2S$
Molecular Weight:	275.3
Appearance:	White to off white solid
Storage Conditions:	-20°C
Description:	<p>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 <i>Streptomyces</i> 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.</p> <p>Collismycin is soluble in ethanol, methanol, DMF and DMSO.</p>
References:	<p>Caerulomycin, a new antibiotic from <i>Streptomyces caeruleus</i> Baldacci: I. Production, isolation, assay and biological properties. Funk A. & Divekar P.V. <i>Can. J. Microbiol.</i> 1959, 5, 317.</p> <p>Collismycin A and B, novel non-steroidal inhibitors of dexamethasone glucocorticoid receptor binding. Shindo K. et al. <i>J. Antibiot.</i> 1994, 47, 1072.</p> <p>Engineering the biosynthesis of the polyketide-nonribosomal peptide collismycin A for generation of analogs with neuroprotective activity. Garcia I. et al. <i>Chem Biol.</i> 2013, 20, 1022.</p> <p>Collismycin A biosynthesis in <i>Streptomyces</i> sp. CS40 is regulated by iron levels through two pathway-specific regulators. Vior N.M. et al. <i>Microbiology</i> 2014, 160, 467.</p>