

Recombinant Streptomyces actuosus Nosiheptide precursor



Catalog No: #AP73013

Orders: order@signalwayantibody.com

Package Size: #AP73013-1 20ug #AP73013-2 100ug #AP73013-3 1mg

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Description

Product Name	Recombinant Streptomyces actuosus Nosiheptide precursor
Brief Description	Recombinant Protein
Host Species	Yeast
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:1-50aaSequence Info:Full Length
Other Names	Antibiotic 9671-RP1 Publication Multhiomycin
Accession No.	C6FX52
Uniprot	C6FX52
Calculated MW	32.4 kDa
Tag Info	N-terminal GST-tagged
Target Sequence	MDAAHLSDLIDALEISEFLDESRLDSEVAKVMSASCTTCECCSCSS
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

Inhibits bacterial protein biosynthesis by binding to ribosomes. Specifically, binds to the complex of 23S rRNA and ribosomal protein L11 (RPLK) in the 50S ribosomal subunit. While allowing a weak binding of elongation factor G (EF-G) to the ribosome and subsequent GTP-hydrolysis, probably impairs conformational changes in both the ribosome and EF-G which are necessary for translocation. In vitro, inhibits Gram-positive bacteria *S.aureus* strain 209P (MIC=0.0009 ?g,ml), *S.aureus* strain 133 (MIC=0.0019 ?g,ml), *S.aureus* strain B3 (MIC=0.003 ?g,ml), *S.aureus* strain Hb (MIC=0.003 ?g,ml), *M.citreus* strain ATCC 8411 (MIC=0.0038 ?g,ml), *M.lysodeikticus* strain ATCC 4698 (MIC=0.003 ?g,ml), *S.lutea* strain ATCC 9341 (MIC=0.0011 ?g,ml), *S.faecalis* strain ATCC 9790 (MIC=0.0007 ?g,ml), *S.viridans* (MIC=0.0065 ?g,ml), *S.pyogenes* hemolyticus strain Dig7 (MIC=0.00028 ?g,ml), *D.pneumoniae* strain Til (MIC=0.00015 ?g,ml), *N.cattrhalis* (MIC=0.0017 ?g,ml), *L.casei* strain ATCC 6633 (MIC=0.003 ?g,ml), *B.cereus* strain ATCC 6630 (MIC=0.0071 ?g,ml) and various isolates of *L.monocytogenes*. In vitro, inhibits Gram-negative bacterium *P.multocida* strain A125 (MIC=0.0024 ?g,ml) but not *M.smegmatis* strain ATCC 6630, *S.typhimurium*, *A.aerogenes* strain ATCC 8308, *P.vulgaris*, *K.pneumoniae* strain ATCC 10031, *S.marcescens* strain A476, *P.aeruginosa* strain Bass or *B.bronchiseptica* strain CN387. Does not inhibit Gram-negative bacterium *E.coli* strain ATCC 9637 but does inhibit purified ribosomes from *E.coli*. In vivo, has no systemic effect in mice infected with staphylococci or streptococci when applied orally or subcutaneously. Has a local effect in mice infected subcutaneously or intraperitoneally with staphylococci when applied immediately afterwards. Is not toxic to mice.

References

"Mapping the binding site of thiopeptide antibiotics by proximity-induced covalent capture."Baumann S., Schoof S., Harkal S.D., Arndt H.D. J. Am. Chem. Soc. 130:5664-5666(2008)Research Topic:Others

Note: This product is for in vitro research use only