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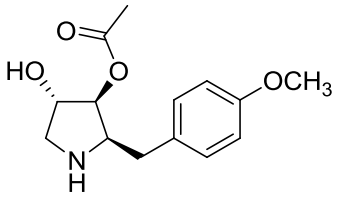
PRODUCT DATA SHEET

Anisomycin

Code No.: **BIA-A1215**

Pack sizes: **25 mg, 100 mg**



Synonyms : Flagecidin, SA 3097C1, PA 106, Anhydroscopin A, NSC 76712

Specifications

CAS #	:	**22862-76-6**
Molecular Formula	:	**$C_{14}H_{19}NO_4$**
Molecular Weight	:	**265.3**
Source	:	***Streptomyces griseolus***
Appearance	:	**White powder**
Purity	:	**>98% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.**

Application Notes

Anisomycin is a phenylmethylenepyrrolidine first isolated from Streptomyces griseolus in 1954 as an antiprotozoan with antifungal activity. Anisomycin is an inhibitor of protein synthesis by binding to the 60S ribosomal subunit. Interestingly, anisomycin has found use for the induction of amnesia in animal models. Anisomycin also induces apoptosis and is a selective signalling agonist, activates mitogen-activated protein (MAP) kinases and is immunomodulatory via its action on T cells.

References

1. Anisomycin, a new antiprotozoa antibiotic. Sobin B.A. & Tanner F.W. Jr., J. Am. Chem. Soc. 1954, 76, 4053
2. Selective inhibition of caspases during apoptotic induction in HL-60 cells. Effects of a tetrapeptide inhibitor. Polverino A.J. & Patterson S.D., J. Biol. Chem. 1997, 272, 7013.
3. Evidence of two mechanisms for the activation of the glucose transporter GLUT1 by anisomycin: p38 (MAP kinase) activation and protein synthesis inhibition in mammalian cells. Barros L.F. et al., J. Physiol. 1997, 504, 517.
4. Anisomycin inhibits the behaviors of T cells and the allogeneic skin transplantation in mice. Xing F. et al., J. Immunother. 2008, 31, 858.

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