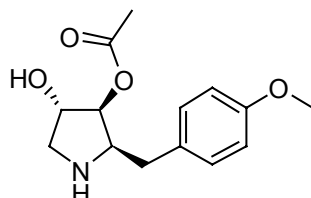


Anisomycin

Code: **BIA-A1215**

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



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

Specifications

CAS # : **22862-76-6**
Molecular Formula : **C₁₄H₁₉NO₄**
Molecular Weight : **265.3**
Source : ***Streptomyces griseolus***
Appearance : **White powder**
Purity : **> 98%**
Long Term Storage : **- 20°C**
Solubility : **Soluble in ethyl acetate, DMSO, dichloromethane. Slightly soluble in water.**

Application Notes

Anisomycin is a phenylmethylenepyrrolidine first isolated from *Streptomyces griseolus* in 1954 as an antiprotozoan with antifungal activity. Anisomycin acts as 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. More recently, anisomycin has been demonstrated to induce apoptosis, to be a selective signalling agonist, to activate mitogen-activated protein (MAP) kinases and to be 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. Poverino 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.