Product overview

Name: Anisomycin
Cat No: HB2239
Short description: Protein synthesis inhibitor. Potent JNK / p38 MAPK activator.

Biological description:

Protein synthesis inhibitor which prevents elongation and causes polysome stabilization by binding to the 60S ribosomal subunit to prevent peptide bond formation.

Also acts as a potent JNK and p38 MAPK activator.

Initiates intracellular signals for rapid induction of immediate-early (IE) genes (e.g. c-fos, fosB, c-jun, JunB and JunD).

Additionally, thought to block late long-term potentiation (L-LTP) and at high doses reduces neuronal activity.

Alternative names: ANI | Flagecidin
Biological action: Antibiotic

Properties

Chemical name: (2R,3S,4S)-2-[(4-Methoxyphenyl)methyl]-3,4-pyrrolidinediol 3-acetate
Molecular Weight: 265.31
Molecular Formula: C_{14}H_{19}NO_{4}
CAS Number: 22862-76-6
PubChem identifier: 253602
SMILES: CC(=O)O[C@@H]1[C@H](CN[C@@H]1CC2=CC=C(C=C2)OC)O
InChIKey: YKJYKKNCCRKFSL-RDBSUJKOSA-N
MDL number: MFCD00077650
Appearance: White to off-white

Storing and Using Your Product

Storage instructions: +4 ºC;
Solubility overview: Soluble in ethanol (50 mM) and DMSO (100 mM)
Important: This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

References for Anisomycin
Anisomycin selectively desensitizes signalling components involved in stress kinase activation and fos and jun induction.


PubMedID: 9528756

The protein synthesis inhibitor anisomycin induces macrophage apoptosis in rabbit atherosclerotic plaques through p38 mitogen-activated protein kinase.

Croons et al (19286921) J Pharmacol Exp Ther 329(3) : 856-64

PubMedID: 19286921

Effects of anisomycin on LTP in the hippocampal CA1: long-term analysis using optical recording.


PubMedID: 11303774