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# DATASHEET

Anisomycin

#### **Product overview**

Name Anisomycin Cat No HB2239 **Alternative names** ANI | Flagecidin

**Purity** >98%

Description Protein synthesis inhibitor. Potent JNK / p38 MAPK activator.

### **Biological Data**

**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.

## **Solubility & Handling**

Solubility overview Storage instructions Storage of solutions

**Shipping Conditions** 

**Important** 

Soluble in ethanol (50 mM) and DMSO (100 mM) +4°C

Prepare and use solutions on the same day if possible. Store solutions at -20°C for up to one month if

storage is required. Equilibrate to RT and ensure the solution is precipitate free before use.

Stable for ambient temperature shipping. Follow storage instructions on receipt.

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not

for human or veterinary use.

### **Chemical Data**

**Chemical name** (2R,3S,4S)-2-[(4-Methoxyphenyl)methyl]-3,4-pyrrolidinediol 3-acetate

**Molecular Weight** 265.31

**Chemical structure** 

Molecular Formula  $C_{14}H_{19}NO_4$ **CAS Number** 22862-76-6 **PubChem identifier** 

CC(=O)O[C@@H]1[C@H](CN[C@@H]1CC2=CC=C(C=C2)OC)O **SMILES** 

**InChiKey** YKJYKKNCCRKFSL-RDBSUJKOSA-N

MDL number MFCD00077650 **Appearance** White to off-white

### References

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

Hazzalin et al (1998) Mol Cell Biol. 18(4) **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)

**PubMedID** 19286921

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

Mochida et al (2001) Neuroreport 12(5) **PubMedID**11303774