## Product overview

<table>
<thead>
<tr>
<th>Name</th>
<th>Anisomycin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat No</td>
<td>HB2239</td>
</tr>
<tr>
<td>Short description</td>
<td>Protein synthesis inhibitor. Potent JNK / p38 MAPK activator.</td>
</tr>
<tr>
<td>Biological description</td>
<td>Protein synthesis inhibitor which prevents elongation and causes polsosome 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.</td>
</tr>
<tr>
<td>Alternative names</td>
<td>ANI</td>
</tr>
<tr>
<td>Biological action</td>
<td>Antibiotic</td>
</tr>
</tbody>
</table>

## Properties

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>(2R,3S,4S)-2-[(4-Methoxyphenyl)methyl]-3,4-pyrrolidinediol 3-acetate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Weight</td>
<td>265.31</td>
</tr>
<tr>
<td>Molecular Formula</td>
<td>C14H19NO4</td>
</tr>
<tr>
<td>CAS Number</td>
<td>22862-76-6</td>
</tr>
<tr>
<td>PubChem Identifier</td>
<td>253602</td>
</tr>
<tr>
<td>SMILES</td>
<td>CC(=O)O[C@@H]1<a href="CN%5BC@@H%5D1CC2=CC=C(C=C2)OC">C@@H</a>O</td>
</tr>
<tr>
<td>InChIKey</td>
<td>YKJYKKNCCRFSL-RDBSUJUKOSA-N</td>
</tr>
<tr>
<td>MDL number</td>
<td>MFCD00077650</td>
</tr>
<tr>
<td>Appearance</td>
<td>White to off-white</td>
</tr>
</tbody>
</table>

## Storing and Using Your Product

<table>
<thead>
<tr>
<th>Storage instructions</th>
<th>+4 °C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solubility overview</td>
<td>Soluble in ethanol (50 mM) and DMSO (100 mM)</td>
</tr>
<tr>
<td>Important</td>
<td>This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.</td>
</tr>
</tbody>
</table>

## 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