

<b>Product Name:</b>	Cinnamycin
<b>Product Number:</b>	C175
<b>CAS Number:</b>	110655-58-8
<b>Molecular Formula:</b>	$C_{89}H_{125}N_{25}O_{25}S_3$
<b>Molecular Weight:</b>	2041.3
<b>Appearance:</b>	White to off white solid
<b>Storage Conditions:</b>	-20°C
<b>Description:</b>	<p>Cinnamycin (lanthiopeptin) is a high molecular weight tricyclic antibiotic produced by several species of Streptovercillium.</p> <p>Cinnamycin is soluble in ethanol, methanol, DMF and DMSO.</p>
<b>Mechanism of Action:</b>	<p>Cinnamycin is a potent indirect inhibitor of phospholipase A2, acting by specifically sequestering phosphatidylethanolamine (PE), a major component of the mammalian plasma cell membrane. Cinnamycin induces trans-bilayer phospholipid movement in cell membranes to expose internally bound PE. At high surface concentrations of PE, cinnamycin induces membrane reorganisation including membrane fusion and alteration of gross morphology.</p>
<b>References:</b>	<p>Lanthiopeptin, a new peptide antibiotic. Production, isolation and properties of lanthiopeptin. Naruse N. J. Antibiot. 1989, 42, 837.</p> <p>Duramycins B and C, two new lanthionine containing antibiotics as inhibitors of phospholipase A2. Structural revision of duramycin and cinnamycin. Fredenhagen A. et al. J. Antibiot. 1990, 43, 1403.</p> <p>Mode of action of the lanthionine-containing peptide antibiotics duramycin, duramycin B and C, and cinnamycin as indirect inhibitors of phospholipase A2. Märki F. et al. Biochem. Pharmacol. 1991, 42, 2027.</p>