

Josamycin

Catalog No: **tcsc0013975**



Available Sizes

Size: 25mg

Size: 100mg



Specifications

CAS No:

16846-24-5

Formula:

$C_{42}H_{69}NO_{15}$

Pathway:

Anti-infection

Target:

Bacterial

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Alternative Names:

EN-141

Observed Molecular Weight:

827.99

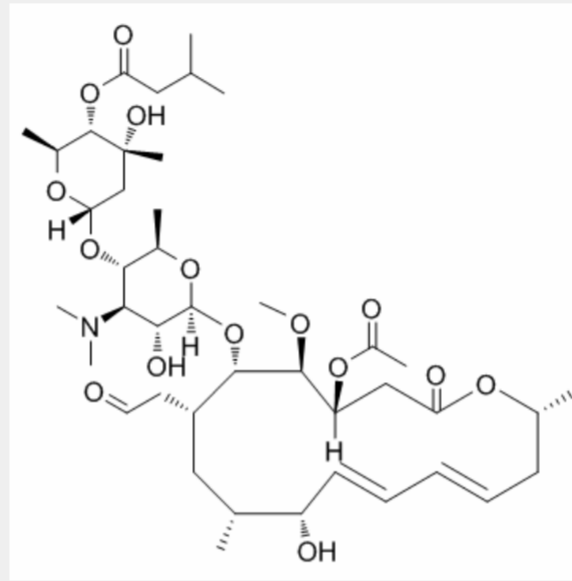
Product Description

Josamycin (EN-141) is a macrolide antibiotic exhibiting antimicrobial activity against a wide spectrum of pathogens, such as **bacteria**. The dissociation constant K_d from ribosome for Josamycin is 5.5 nM.

IC50 & Target: Kd: 5.5 nM (ribosome)^[1]

In Vitro: Studies show that the average lifetime on the ribosome is 3 h for Josamycin and that the dissociation constants for Josamycin binding to the ribosome is 5.5 nM. Josamycin slows down formation of the first peptide bond of a nascent peptide in an amino acid-dependent way and completely inhibits formation of the second or third peptide bond, depending on peptide sequence at a saturating drug concentration, synthesis of fulllength proteins is completely shut down by Josamycin. At a saturating drug concentration, synthesis of fulllength proteins is completely shut down by Josamycin^[1].

In Vivo: Blood and tissue levels of Josamycin after oral administration are 200 mg/kg to rabbits. Tissue levels are generally much higher than the blood levels, and 3 h after the administration, when the blood level is very low, the tissue levels are rather higher than those 1 h after the dose. One hour after the medication, the level in the lungs is the highest of all the tissue levels^[2].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!