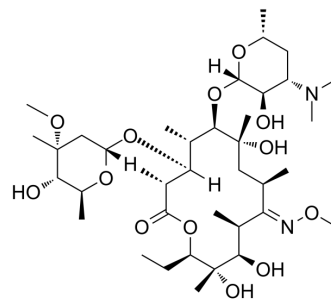


## Lexithromycin

<b>Cat. No.:</b>	HY-105932
<b>CAS No.:</b>	53066-26-5
<b>Molecular Formula:</b>	C <sub>38</sub> H <sub>70</sub> N <sub>2</sub> O <sub>13</sub>
<b>Molecular Weight:</b>	762.97
<b>Target:</b>	Bacterial; Antibiotic
<b>Pathway:</b>	Anti-infection
<b>Storage:</b>	-20°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 50 mg/mL (65.53 mM); ultrasonic and warming and heat to 60°C				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM	1.3107 mL	6.5533 mL	13.1067 mL
		5 mM	0.2621 mL	1.3107 mL	2.6213 mL
		10 mM	0.1311 mL	0.6553 mL	1.3107 mL
Please refer to the solubility information to select the appropriate solvent.					
<b>In Vivo</b>	1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 5 mg/mL (6.55 mM); Clear solution				
	2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 3.25 mg/mL (4.26 mM); Clear solution				
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 3.25 mg/mL (4.26 mM); Clear solution				

### BIOLOGICAL ACTIVITY

<b>Description</b>	Lexithromycin is an erythromycin A derivative, with antibacterial activity.
<b>IC<sub>50</sub> &amp; Target</b>	Bacterial <sup>[1]</sup>
<b>In Vitro</b>	Lexithromycin is an erythromycin A derivative, with antibacterial activity. Lexithromycin shows minimal inhibitory concentration (MIC) of 0.06 µg/mL against <i>S. pyogenes</i> CN10A and <i>Streptococcus</i> sp. 64/848C, 0.25 µg/mL against <i>Staphylococcus aureus</i> Oxford, 0.5 µg/mL against <i>S. aureus</i> Russell and <i>S. aureus</i> T2, 4 µg/mL against <i>S. pyogenes</i> CN10A and <i>Haemophilus influenzae</i> Wy 21 <sup>[1]</sup> .

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MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## CUSTOMER VALIDATION

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- J Chem Inf Model. 2021 Mar 18.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

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[1]. Hunt E, et al. Erythromycin A 11,12-methylene acetal. J Antibiot (Tokyo). 1988 Nov;41(11):1644-8.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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