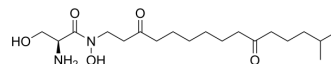


Lipoxamycin

Cat. No.:	HY-119759
CAS No.:	32886-15-0
Molecular Formula:	C ₁₉ H ₃₆ N ₂ O ₅
Molecular Weight:	372.5
Target:	Fungal
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Lipoxamycin is an antifungal antibiotic and a potent serine palmitoyltransferase inhibitor with an IC ₅₀ of 21 nM ^{[1][2]} .
IC₅₀ & Target	Serine palmitoyltransferase ^[1]
In Vitro	<p>Lipoxamycin has antifungal activity against a panel of human pathogenic fungi with better potency against some of the Candida species (MIC values, 0.25-16 µg/mL). Cryptococcus neoformans is the most sensitive organism, followed by various species of Candida. Other filamentous fungi are sensitive to the Lipoxamycin in disk diffusion assays^[1].</p> <p>Lipoxamycin has a long alkyl chain and an amino-containing polar head group. Lipoxamycin is on the same order of potency as the sphingofungins and also have potent activity against the mammalian enzyme^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>
In Vivo	<p>Lipoxamycin is highly toxic in mice when applied subcutaneously or topically. Toxicity may be mechanism based, since studies with a Chinese hamster ovary cell mutant have shown that the serine palmitoyltransferase is an essential enzyme in mammalian cells^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

REFERENCES

- [1]. S M Mandala, et al. Inhibition of Serine Palmitoyl-Transferase Activity by Lipoxamycin. J Antibiot (Tokyo). 1994 Mar;47(3):376-9.
- [2]. H A Whaley. The Structure of Lipoxamycin, a Novel Antifungal Antibiotic. J Am Chem Soc. 1971 Jul 28;93(15):3767-9.

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

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