

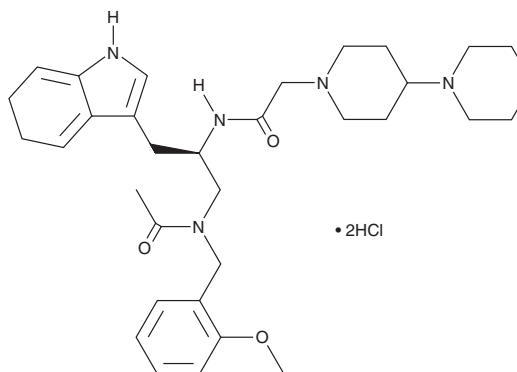
PRODUCT INFORMATION



Lanepitant (hydrochloride)

Item No. 43044

CAS Registry No.: 170508-05-1
Formal Name: (R)-N-[2-[acetyl[(2-methoxyphenyl)methyl]amino]-1-(1H-indol-3-ylmethyl)ethyl]-[1,4'-bipiperidine]-1'-acetamide, dihydrochloride
Synonym: LY303870
MF: $C_{33}H_{45}N_5O_3 \cdot 2HCl$
FW: 632.7
Purity: $\geq 98\%$
Supplied as: A solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Lanepitant (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the lanepitant (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Lanepitant (hydrochloride) is slightly soluble (0.1-1 mg/ml) in acetonitrile.

Lanepitant (hydrochloride) is slightly soluble (0.1-1 mg/ml) in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Lanepitant is a neurokinin-1 (NK_1) receptor antagonist ($K_i = 0.15$ nM).¹ It inhibits Ac-[Arg⁶,Sar⁹,Met(O₂)¹¹]-substance P₆₋₁₁-induced increases in tail biting and scratching in mice when administered at doses of 1, 5, or 10 mg/kg. Lanepitant (10 mg/kg) inhibits late-phase formalin-induced increases in paw licking in mice. It reduces corneal opacity and neovascularization and decreases leukocyte infiltration in a mouse model of alkali burn-induced corneal damage when topically applied at a concentration of 6.4 mg/ml six times per day.²

References

1. Iyengar, S., Hipskind, P.A., Gehlert, D.R., *et al.* LY303870, a centrally active neurokinin-1 antagonist with a long duration of action. *J. Pharmacol. Exp. Ther.* **280**(2), 774-785 (1996).
2. Bignami, F., Giacomini, C., Lorusso, A., *et al.* NK1 receptor antagonists as a new treatment for corneal neovascularization. *Invest. Ophthalmol. Vis. Sci.* **55**(10), 6783-6794 (2014).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 04/01/2025

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM