

PRODUCT INFORMATION

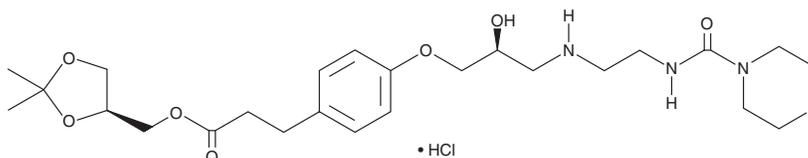


Landiolol (hydrochloride)

Item No. 44229

CAS Registry No.: 144481-98-1
Formal Name: 4-[(2S)-2-hydroxy-3-[[2-[(4-morpholinylcarbonyl)amino]ethyl]amino]propoxy]-benzenepropanoic acid, [(4S)-2,2-dimethyl-1,3-dioxolan-4-yl]methyl ester, monohydrochloride

Synonym: ONO-1101
MF: C₂₅H₃₉N₃O₈ • HCl
FW: 546.1
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Landiolol (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the landiolol (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Landiolol (hydrochloride) is slightly soluble (0.1-1 mg/ml) in ethanol and sparingly soluble (1-10 mg/ml) in DMSO.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of landiolol (hydrochloride) can be prepared by directly dissolving the solid in aqueous buffers. Landiolol (hydrochloride) is sparingly soluble (1-10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

Landiolol is an antagonist of the β_1 -adrenergic receptor (β_1 -AR).¹ It selectively induces relaxation of isolated and perfused guinea pig atrial strips that endogenously express β_1 -ARs over isolated and perfused guinea pig tracheal strips that endogenously express β_2 -ARs (pA_{2s} = 6.59 and 4.18, respectively). Infusion of landiolol (10 μ g/kg per minute) inhibits tachycardia induced by isoproterenol (Item No. 15592) in dogs. Formulations containing landiolol have been used in the treatment of supraventricular tachycardia.

Reference

1. Iguchi, S., Iwamura, H., Nishizaki, M., *et al.* Development of a highly cardioselective ultra short-acting β -blocker, ONO-1101. *Chem. Pharm. Bull. (Tokyo)* **40(6)**, 1462-1469 (1992).

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, 09/26/2025

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