

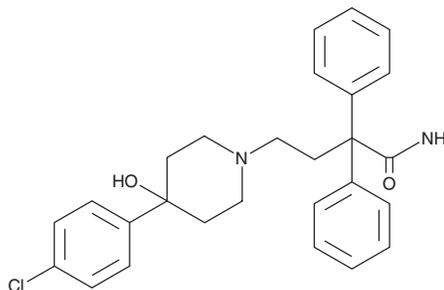
PRODUCT INFORMATION



N-didesmethyl Loperamide

Item No. 39559

CAS Registry No.: 66164-06-5
Formal Name: 4-(4-chlorophenyl)-4-hydroxy- α,α -diphenyl-1-piperidinebutanamide
Synonym: R 21345
MF: C₂₇H₂₉ClN₂O₂
FW: 449.0
Purity: $\geq 95\%$
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

N-didesmethyl Loperamide is supplied as a solid. A stock solution may be made by dissolving the N-didesmethyl loperamide in the solvent of choice, which should be purged with an inert gas. N-didesmethyl Loperamide is slightly soluble in acetonitrile and chloroform.

Description

N-didesmethyl Loperamide is an active metabolite of the peripheral μ_1 -opioid receptor agonist loperamide.¹ It inhibits electricity-induced contractions in isolated guinea pig myenteric plexus (IC₅₀ = 370 nM).² N-didesmethyl Loperamide sensitizes a chloroquine-resistant *P. falciparum* strain to chloroquine (EC₅₀ = 482 nM) without inducing toxicity in A-10 vascular smooth muscle cells (IC₅₀ = >10,000 nM).³

References

1. Yoshida, K., Nambu, K., Arakawa, S., *et al.* Metabolites of loperamide in rats. *Biomed. Mass Spectrom.* **6(6)**, 253-259 (1979).
2. Wüster, M. and Herz, A. Opiate agonist action of antidiarrheal agents *in vitro* and *in vivo* - findings in support for selective action. *Naunyn Schmiedebergs Arch. Pharmacol.* **301(3)**, 187-194 (1978).
3. Boudhar, A., Ng, X.W., Loh, C.Y., *et al.* Overcoming chloroquine resistance in malaria: Design, synthesis and structure-activity relationships of novel chemoreversal agents. *Eur. J. Med. Chem.* **119**, 231-249 (2016).

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, 09/07/2023

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