

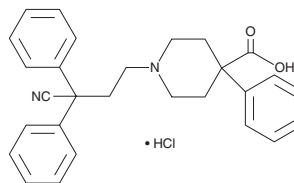
PRODUCT INFORMATION



Difenoxin (hydrochloride)

Item No. 9001921

CAS Registry No.: 35607-36-4
Formal Name: 1-(3-cyano-3,3-diphenylpropyl)-4-phenyl-4-piperidinecarboxylic acid, monohydrochloride
Synonyms: Diphenoxylic Acid, R 15403
MF: C₂₈H₂₈N₂O₂ • HCl
FW: 461.0
Purity: ≥98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥5 years



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

Description

Diphenoxylate is an opioid used to treat diarrhea.¹ It also has analgesic actions and, at supratherapeutic doses, psychoactive effects.¹ Difenoxin is the active metabolite of diphenoxylate.^{2,3} It is thought to act primarily as a preferential agonist of enteric opiate receptors.^{3,4} This product is intended for forensic and research applications.

References

1. Regnard, C., Twycross, R., Mihalyo, M., *et al.* Loperamide. *J. Pain Symptom Manage.* **42(2)**, 319-323 (2011).
2. Jackson, L.S. and Stafford, J.E. The evaluation and application of a radioimmunoassay for the measurement of diphenoxylic acid, the major metabolite of diphenoxylate hydrochloride (Lomotil), in human plasma. *J. Pharmacol. Methods* **18(3)**, 189-197 (1987).
3. De Luca, A. and Coupar, I.M. Difenoxin and loperamide: Studies on possible mechanisms of intestinal antisecretory action. *Naunyn Schmiedeberg's Arch. Pharmacol.* **347(2)**, 231-237 (1993).
4. Coupar, I.M. The peristaltic reflex in the rat ileum: Evidence for functional mu- and delta-opiate receptors. *J. Pharm. Pharmacol.* **47(8)**, 643-646 (1995).

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, 07/13/2023

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