

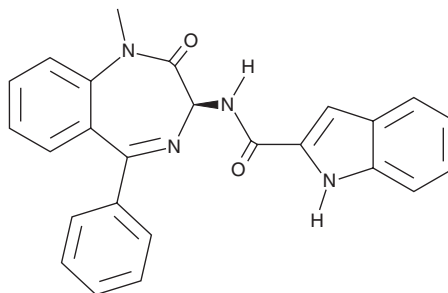
PRODUCT INFORMATION



Devazepide

Item No. 38509

CAS Registry No.: 103420-77-5
Formal Name: N-[(3S)-2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl]-1H-indole-2-carboxamide
Synonyms: L-364,718, MK-329, ZINC01847292
MF: C₂₅H₂₀N₄O₂
FW: 408.5
Purity: ≥98%
UV/Vis.: λ_{max}: 223, 296 nm
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

Devazepide is supplied as a solid. A stock solution may be made by dissolving the devazepide in the solvent of choice, which should be purged with an inert gas. Devazepide is soluble in the organic solvent DMSO.

Description

Devazepide is a nonpeptide antagonist of the cholecystokinin 1 (CCK₁) receptor (K_i = 0.3 nM).¹ It is selective for CCK₁ over the CCK₂ receptor (K_i = 342 nM). Devazepide inhibits CCK-8-induced amylase release in isolated dispersed rat pancreatic acini (IC₅₀ = 25.4 nM). It reduces CCK-8-induced decreases in gastric emptying and food intake in rats (ED₅₀s = 140 and 321 μg/kg, respectively), as well as CCK-8-induced contractions of colon and gall bladder in rabbits and cats, respectively (ED₅₀s = 34 and 210 μg/kg, respectively).² Devazepide (1 mg/kg) enhances morphine-induced increases in tail-flick latency and prevents the development of morphine tolerance, but does not affect morphine dependence, in rats.³ It also induces apoptosis and cell cycle arrest at the G₁/G₀ phase in, and inhibits the migration of, 5637 bladder cancer cells when used at a concentration of 25 μM.⁴

References

1. Martín-Martínez, M., Bartolomé-Nebreda, J.M., Gómez-Monterrey, I., *et al.* Synthesis and stereochemical structure-activity relationships of 1,3-dioxoperhydropyrido[1,2-c]pyrimidine derivatives: Potent and selective cholecystokinin-A receptor antagonists. *J. Med. Chem.* **40(21)**, 3402-3407 (1997).
2. Lotti, V.J., Pendleton, R.G., Gould, R.J., *et al.* *In vivo* pharmacology of L-364,718, a new potent nonpeptide peripheral cholecystokinin antagonist. *J. Pharmacol. Exp. Ther.* **241(1)**, 103-109 (1987).
3. Dourish, C.T., Hawley, D., and Iversen, S.D. Enhancement of morphine analgesia and prevention of morphine tolerance in the rat by the cholecystokinin antagonist L-364,718. *Eur. J. Pharmacol.* **147(3)**, 469-472 (1988).
4. Zhang, H., Bao, X., Zhang, J., *et al.* Devazepide suppresses cell proliferation and migration, and induces apoptosis in bladder carcinoma. *Transl. Androl. Urol.* **10(5)**, 2113-2121 (2021).

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, 06/30/2023

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