

PRODUCT INFORMATION

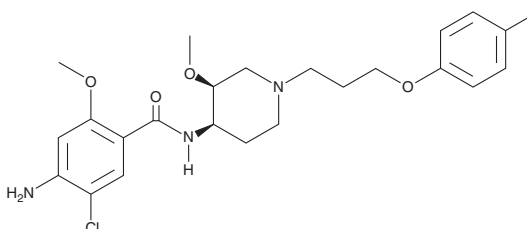


Cisapride

Item No. 21657

CAS Registry No.: 81098-60-4
Formal Name: *rel*-4-amino-5-chloro-N-[1-[(3*R*,4*S*)-3-(4-fluorophenoxy)propyl]-3-methoxy-4-piperidinyl]-2-methoxy-benzamide

MF: C₂₃H₂₉ClFN₃O₄
FW: 466.0
Purity: ≥98%
UV/Vis.: λ_{max}: 214, 276, 308 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

Cisapride is supplied as a crystalline solid. A stock solution may be made by dissolving the cisapride in the solvent of choice, which should be purged with an inert gas. Cisapride is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of cisapride in these solvents is approximately 30 mg/ml. Cisapride is also slightly soluble in ethanol.

Cisapride is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, cisapride should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Cisapride has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Cisapride is an agonist of serotonin (5-HT) receptor subtype 5-HT₄ (IC₅₀ = 0.483 μM in COS-7 cells expressing the human receptor).¹ It induces relaxation of precontracted isolated rat esophageal thoracic muscularis mucosae preparations (EC₅₀ = 102.33 nM). Cisapride (0.5 mg/kg) increases the rate of gastric emptying in rats. It is also a human ether-a-go-go related gene (hERG) channel blocker that binds to hERG channels with an IC₅₀ value of less than 1 μM in a fluorescence polarization assay. Formulations containing cisapride have previously been used in the treatment of nocturnal heartburn associated with gastroesophageal reflux disease.

Reference

1. Park, J.S., Im, W., Choi, S., *et al.* Discovery and SAR of N-(1-((substituted piperidin-4-yl)methyl)-3-methoxypiperidin-4-yl)-2-methoxybenzamide derivatives: 5-Hydroxytryptamine receptor 4 agonist as a potent prokinetic agent. *Eur. J. Med. Chem.* **109**, 75-88 (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.

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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