# **PRODUCT** INFORMATION



Cisapride-d<sub>6</sub>

Item No. 28701

Formal Name:	rel-4-amino-5-chloro-N-[1-[(3R,4S)- 3-(4-fluorophenoxy)propyl-d <sub>6</sub> ]-3-
	methoxy-4-piperidinyl]-2-methoxy-
	benzamide
MF:	
	$C_{23}H_{23}D_6CIFN_3O_4$
FW:	472.0 I II I D D
<b>Chemical Purity:</b>	≥98% (Cisapride)
Deuterium	LIN H
Incorporation:	≥99% deuterated forms (d <sub>1</sub> -d <sub>6</sub> ); ≤1% d <sub>0</sub> $H_{2N}$
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	

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# Laboratory Procedures

Cisapride-d<sub>6</sub> is intended for use as an internal standard for the quantification of cisapride (Item No. 21657) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Cisapride- $d_6$  is supplied as a solid. A stock solution may be made by dissolving the cisapride- $d_6$  in the solvent of choice, which should be purged with an inert gas. Cisapride- $d_{\beta}$  is soluble in methanol, DMSO, and dimethyl formamide.

# Description

Cisapride is an agonist of serotonin (5-HT) receptor subtype 5-HT<sub>4</sub> (IC<sub>50</sub> = 0.483  $\mu$ M in COS-7 cells expressing the human receptor).<sup>1</sup> It induces relaxation of precontracted isolated rat esophageal thoracic muscularis mucosae preparations (EC<sub>50</sub> = 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 IC<sub>50</sub> value of less than 1  $\mu$ M 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)-3methoxypiperidin-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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