# PRODUCT INFORMATION



## Des-4-fluorobenzyl Mosapride

Item No. 22157

CAS Registry No.: 152013-26-8

Formal Name: 4-amino-5-chloro-2-ethoxy-N-(2-

morpholinylmethyl)-benzamide

Synonym: Des-p-fluorobenzyl Mosapride

MF:  $C_{14}H_{20}CIN_3O_3$ 

FW: 313.8 **Purity:** ≥90% 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**

Des-4-fluorobenzyl Mosapride is supplied as a solid. A stock solution may be made by dissolving the des-4-fluorobenzyl mosapride in the solvent of choice. Des-4-fluorobenzyl Mosapride is slightly soluble in chloroform and methanol (warmed).

### Description

Des-4-fluorobenzyl Mosapride is the primary metabolite of mosapride. Mosapride is a gastroprokinetic agent that enhances upper GI motility by activating serotonin receptor 4 (5-HT $_4$ ; EC $_{50}$  = 74.2 nM, in guinea pig ileal longitudinal muscle myenteric plexus). 1,2 Mosapride increases canine, equine, and guinea pig colonic motility in vivo.<sup>3,4</sup> Formulations containing mosapride are used in human and veterinary medicine to prevent post-surgical- and Parkinson's-induced constipation.<sup>3,5</sup>

## References

- 1. Mine, Y., Yoshikawa, T., Oku, S., et al. Comparison of effect of mosapride citrate and existing 5-HT<sub>A</sub> receptor agonists on gastrointestinal motility in vivo and in vitro. J. Pharmacol. Exp. Ther. 283(3), 1000-1008 (1997).
- 2. Yoshida, N. and Ito, T. Mosapride citrate (AS-4370), a new gastroproltinetic agent, is a partial 5-HT<sub>4</sub> receptor agonist in the gut. Neurogastroenterol. Motil. 6(3), 197-204 (1994).
- Yoshida, N., Ito, T., Karasawa, T., et al. AS-4370, a new gastrokinetic agent, enhances upper gastrointestinal motor activity in conscious dogs. J. Pharmacol. Exp. Ther. 257(2), 781-787 (1991).
- Okamura, K., Sasaki, N., Yamada, N., et al. Effects of mosapride citrate, metoclopramide hydrochloride, lidocaine hydrochloride, and cisapride citrate on equine gastric emptying, small intestinal and caecal motility. Res. Vet. Sci. 86(2), 302-308 (2009).
- 5. Liu, Z., Sakakibara, R., Odaka, T., et al. Mosapride citrate, a novel 5-HT4 agonist and partial 5-HT3 antagonist, ameliorates constipation in parkinsonian patients. Mov. Disord. 20(6), 680-686 (2005).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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