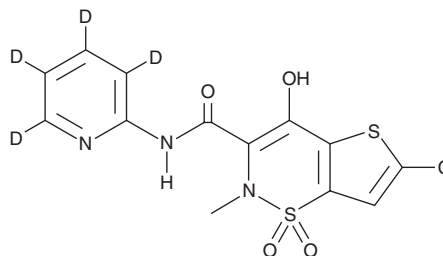


PRODUCT INFORMATION



Lornoxicam-d₄ Item No. 33275

CAS Registry No.: 1216527-48-8
Formal Name: 6-chloro-4-hydroxy-2-methyl-N-2-pyridinyl-d₄-2H-thieno[2,3-e]-1,2-thiazine-3-carboxamide-1,1-dioxide
Synonyms: Chlortenoxicam-d₄, Ro 13-9297-d₄
MF: C₁₃H₆ClD₄N₃O₄S₂
FW: 375.8
Chemical Purity: ≥98% (Lornoxicam)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₄); ≤1% d₀
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

Lornoxicam-d₄ is intended for use as an internal standard for the quantification of lornoxicam (Item No. 70220) 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).

Lornoxicam-d₄ is supplied as a solid. A stock solution may be made by dissolving the lornoxicam-d₄ in the solvent of choice, which should be purged with an inert gas. Lornoxicam-d₄ is soluble in the organic solvent DMSO at a concentration of approximately 2 mg/ml.

Description

Lornoxicam is a COX inhibitor and non-steroidal anti-inflammatory drug (NSAID) with anti-inflammatory and analgesic properties.¹ It inhibits production of thromboxane B₂ (TXB₂; Item No. 19030) from arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607) in HEL human erythroleukemic cells (IC₅₀ = 3 nM), which endogenously express COX-1, as well as inhibits LPS-induced formation of prostaglandin F_{1α} (PGF_{1α}; Item No. 15010) from arachidonic acid in Mono-Mac-6 cells (IC₅₀ = 8 nM), which endogenously express COX-2. Lornoxicam reduces LPS-induced production of nitric oxide and IL-6 in cell-based assays with IC₅₀ values of 65 and 54 μM, respectively. It reduces carrageenan-induced paw edema in rats when administered intravenously at doses ranging from 0.1 to 9 mg/kg.² Formulations containing lornoxicam have been used in the management of postoperative pain.

References

1. Berg, J., Fellier, H., Christoph, T., *et al.* The analgesic NSAID lornoxicam inhibits cyclooxygenase (COX)-1/-2, inducible nitric oxide synthase (iNOS), and the formation of interleukin (IL)-6 in vitro. *Inflamm. Res.* **48(7)**, 369-379 (1999).
2. Buritova, J. and Besson, J.M. Potent anti-inflammatory/analgesic effects of lornoxicam in comparison to other nsoids: A c-Fos study in the rat. *Inflammopharmacology* **5(4)**, 331-341 (1997).

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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