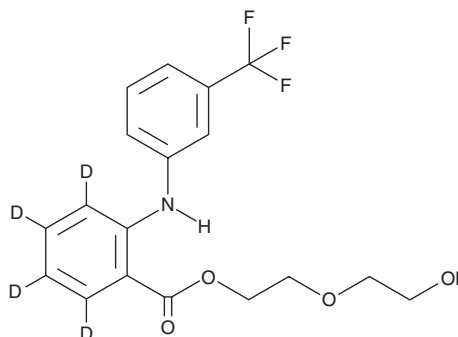


PRODUCT INFORMATION



Etofenamate-d₄ Item No. 30745

CAS Registry No.: 1329837-73-1
Formal Name: 2-(2-hydroxyethoxy)ethyl
2-((3-(trifluoromethyl)phenyl)amino)
benzoate-3,4,5,6-d₄
MF: C₁₈H₁₄D₄F₃NO₄
FW: 373.4
Chemical Purity: ≥98% (Etofenamate)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₄); ≤1% d₀
Supplied as: An oil
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Etofenamate-d₄ is intended for use as an internal standard for the quantification of etofenamate (Item No. 23674) 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).

Etofenamate-d₄ is supplied as an oil. A stock solution may be made by dissolving the etofenamate-d₄ in the solvent of choice, which should be purged with an inert gas. Etofenamate-d₄ is soluble in methanol and acetonitrile.

Description

Etofenamate is a non-steroidal anti-inflammatory drug (NSAID) and diethylene glycol ester form of flufenamic acid (Item No. 21447) that has anti-inflammatory and analgesic activities.^{1,2} It inhibits lipoxygenase isolated from guinea pig leukocytes (IC₅₀ = 5.3 μM) and the production of prostaglandin E₂ (PGE₂; Item No. 14010) in stimulated rat peritoneal macrophages.¹ *In vivo*, etofenamate reduces acetic acid-induced vascular permeability in mice and UV-induced erythema in guinea pigs in a dose-dependent manner at doses ranging from 40-320 and 5-20 mg/kg, respectively.² Etofenamate (40 mg/kg per day for 21 days) inhibits inflammation in a rat model of adjuvant-induced arthritis. It also decreases the pain response in a silver nitrate-induced rat model of arthritis and the acetic acid-induced writhing test in mice, indicating analgesic activity. Formulations containing etofenamate have been used in the treatment of osteoarthritis.

References

1. Nakamura, H., Motoyoshi, S., Ishii, K., *et al.* The mode of anti-inflammatory action of a topical non-steroidal anti-inflammatory drug, etofenamate. *Nihon Yakurigaku Zasshi*. **89(1)**, 15-24 (1987).
2. Nakamura, H., Motoyoshi, S., Imazu, C., *et al.* Anti-inflammatory, analgesic and anti-pyretic activities of a non-steroidal anti-inflammatory drug, etofenamate, in experimental animals. *Nihon Yakurigaku Zasshi*. **80(2)**, 125-135 (1982).

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
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