

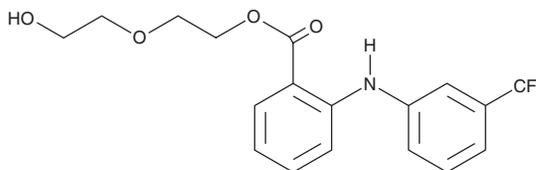
PRODUCT INFORMATION



Etofenamate

Item No. 23674

CAS Registry No.: 30544-47-9
Formal Name: 2-[[3-(trifluoromethyl)phenyl]amino]-benzoic acid, 2-(2-hydroxyethoxy)ethyl ester
MF: C₁₈H₁₈F₃NO₄
FW: 369.3
Purity: ≥98%
UV/Vis.: λ_{max}: 205, 221, 287, 347 nm
Supplied as: A neat 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 is supplied as a neat oil. A stock solution may be made by dissolving the etofenamate in the solvent of choice. Etofenamate is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of etofenamate is approximately 50 mg/ml in ethanol and approximately 40 mg/ml in DMSO and DMF.

Etofenamate is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, etofenamate should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Etofenamate has a solubility of approximately 0.1 mg/ml in a 1:5 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

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.² *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.¹ 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., 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).
2. 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).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/28/2022

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