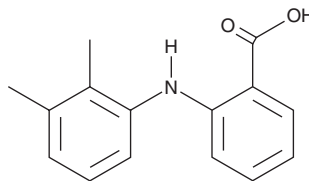


PRODUCT INFORMATION

Mefenamic Acid

Item No. 23650

CAS Registry No.: 61-68-7
Formal Name: 2-[(2,3-dimethylphenyl)amino]-benzoic acid
Synonyms: C.I. 473, CN 35355, NSC 94437
MF: C₁₅H₁₅NO₂
FW: 241.3
Purity: ≥98%
Supplied as: A solid
Storage: 4°C
Stability: ≥4 years



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

Laboratory Procedures

Mefenamic acid is supplied as a solid. A stock solution may be made by dissolving the mefenamic acid in the solvent of choice, which should be purged with an inert gas. Mefenamic acid is slightly soluble in DMSO and methanol.

Description

Mefenamic acid is a non-steroidal anti-inflammatory drug (NSAID) and a COX-2 inhibitor.¹ It binds to COX-2 ($K_d = 4$ nM) and inhibits COX-2-dependent oxygenation of arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607) *in vitro* ($K_i = 10$ μM). Mefenamic acid (30 mg/kg) reduces acetic acid-induced writhing in rats.² It inhibits increases in skin thickness in a mouse model of delayed-type hypersensitivity induced by dinitrochlorobenzene (DNBC).² Mefenamic acid also reduces the antibody response to sheep red blood cells in mice.

References

1. Prusakiewicz, J.J., Duggan, K.C., Rouzer, C.A., *et al.* Differential sensitivity and mechanism of inhibition of COX-2 oxygenation of arachidonic acid and 2-arachidonoylglycerol by ibuprofen and mefenamic acid. *Biochemistry* **48**(31), 7353-7355 (2009).
2. Roszkowski, A.P., Rooks, W.H., Tomolonis, A.J., *et al.* Anti-inflammatory and analgetic properties of d-2-(6'-methoxy-2'-naphthyl)-propionic acid (naproxen). *J. Pharmacol. Exp. Ther.* **179**(1), 114-123 (1971).

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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