

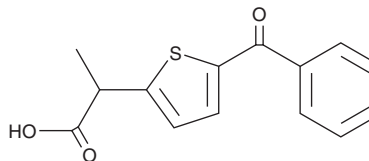
PRODUCT INFORMATION



Tiaprofenic Acid

Item No. 27364

CAS Registry No.: 33005-95-7
Formal Name: 5-benzoyl- α -methyl-2-thiopheneacetic acid
Synonyms: RU 15060, Tiaprofen
MF: C₁₄H₁₂O₃S
FW: 260.3
Purity: ≥98%
UV/Vis.: λ_{max} : 303 nm
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

Tiaprofenic acid is supplied as a solid. A stock solution may be made by dissolving the tiaprofenic acid in the solvent of choice. Tiaprofenic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of tiaprofenic acid in ethanol and DMSO is approximately 20 mg/ml and approximately 15 mg/ml in DMF.

Tiaprofenic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, tiaprofenic acid should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Tiaprofenic acid has a solubility of approximately 0.09 mg/ml in a 1:10 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Tiaprofenic acid is a COX inhibitor and a non-steroidal anti-inflammatory drug (NSAID) with anti-inflammatory and analgesic activities.¹ It inhibits synthesis of prostaglandin E₂ (PGE₂; Item No. 14010) and PGF_{2 α} (Item Nos. 16010 | 16020) from arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607) in bovine seminal vesicle microsomes and inhibits thromboxane B₂ (TXB₂; Item No. 19030) formation in human umbilical cord arteries bathed in clotting human blood (IC₅₀ = 0.71 μ M).^{1,2} Tiaprofenic acid has anti-inflammatory activity in rat models of carrageenan-induced edema and adjuvant-induced arthritis and has analgesic activity in acetic acid- or phenylquinone-induced writhing tests in rodents.¹

References

1. Sorkin, E.M. and Brogden, R.N. Tiaprofenic acid. A review of its pharmacological properties and therapeutic efficacy in rheumatic diseases and pain states. *Drugs* **29**(3), 208-235 (1985).
2. Schrör, K. and Seidel, H. Blood-vessel wall arachidonate metabolism and its pharmacological modification in a new in vitro assay system. *Naunyn Schmiedebergs Arch. Pharmacol.* **337**(2), 177-182 (1988).

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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