

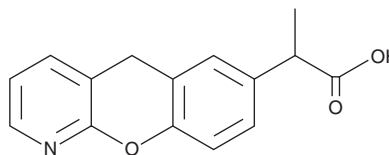
PRODUCT INFORMATION



Pranoprofen

Item No. 17875

CAS Registry No.: 52549-17-4
Formal Name: α -methyl-5H-[1]benzopyrano[2,3-b]pyridine-7-acetic acid
Synonyms: Pyranoprofen, Y 8004
MF: C₁₅H₁₃NO₃
FW: 255.3
Purity: \geq 98%
UV/Vis.: λ_{max} : 247, 276 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years



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

Laboratory Procedures

Pranoprofen is supplied as a crystalline solid. A stock solution may be made by dissolving the pranoprofen in the solvent of choice, which should be purged with an inert gas. Pranoprofen is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of pranoprofen in these solvents is approximately 1, 10, and 25 mg/ml, respectively.

Pranoprofen is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, pranoprofen should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Pranoprofen has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Pranoprofen is a non-steroidal anti-inflammatory drug (NSAID) and COX-1 inhibitor ($IC_{50} = 3.1 \mu\text{M}$).^{1,2} It decreases *B. pertussis*-induced production of prostaglandin E₂ (PGE₂; Item No. 14010) in isolated rat peritoneal leukocytes ($IC_{50} = 0.39 \mu\text{M}$).² Ocular application of pranoprofen reduces corneal epithelial damage in a mouse model of corneal alkali burns.¹

References

- Chen, M., Gureeye, A., Cissé, Y., *et al.* The therapeutic effects and possible mechanism of pranoprofen in mouse model of corneal alkali burns. *J. Ophthalmol.* 7485912 (2020).
- Naka, Y., Yamada, I., Ochi, H., *et al.* Structural optimization of alkyl-substituted 2-(7-5H-[1]benzopyrano[2,3-b]pyridyl)propionic acid as anti-inflammatory agents. *Bioorg. Med. Chem. Lett.* 5(9), 959-962 (1995).

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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