PRODUCT INFORMATION



Suprofen

Item No. 21350

CAS Registry No.: 40828-46-4

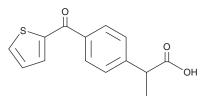
Formal Name: α-methyl-4-(2-thienylcarbonyl)-benzeneacetic acid Synonyms: NSC 303611, R 25061, (±)-Suprofen, TN 762

MF: $C_{14}H_{12}O_3S$ FW: 260.3

Purity: ≥98% λ_{max} : 266, 290 nm A crystalline solid UV/Vis.: Supplied as:

-20°C Storage: Stability: ≥4 years

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



Laboratory Procedures

Suprofen is supplied as a crystalline solid. A stock solution may be made by dissolving the suprofen in the solvent of choice. Suprofen is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of suprofen in ethanol is approximately 20 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of suprofen can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of suprofen in PBS, pH 7.2, is approximately 0.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Suprofen is a non-steroidal anti-inflammatory drug (NSAID) that non-selectively inhibits both isoforms of cyclooxygenase (COX; IC_{50} s = 1.1 and 8.7 μ M for COX-1 and COX-2, respectively).^{1,2}

References

- 1. Warner, T.D., Giuliano, F., Vojnovic, I., et al. Nonsteroid drug selectivities for cyclo-oxygenase-1 rather than cyclo-oxygenase-2 are associated with human gastrointestinal toxicity: A full in vitro analysis. Proc. Natl. Acad. Sci. USA 96(13), 7563-7568 (1999).
- 2. Barnett, J., Chow, J., Ives, D., et al. Purification, characterization and selective inhibition of human prostaglandin G/H synthase 1 and 2 expressed in the baculovirus system. Biochim. Biophys. Acta. 1209, 130-139 (1994).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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