Meclofenamate (sodium salt)
Item No. 70550

CAS Registry No.: 6385-02-0
Formal Name: 2-[(2,6-dichloro-3-methylphenyl)amino]-benzoic acid, monosodium salt
Synonym: Meclofenamic Acid
MF: C_{14}H_{10}Cl_{2}NO_{2} • Na
FW: 318.1
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid

Laboratory Procedures
For long term storage, we suggest that meclofenamate (sodium salt) be stored as supplied at -20°C. It will be stable for at least two years.

Meclofenamate (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the meclofenamate (sodium salt) in an organic solvent purged with an inert gas. Meclofenamate (sodium salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of meclofenamate (sodium salt) in these solvents is approximately 100, 75, and 39 mg/ml, respectively.

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 meclofenamate (sodium salt) can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of meclofenamate (sodium salt) in PBS (pH 7.2) is approximately 50 µg/ml. The solubility of meclofenamate (sodium salt) in PBS (pH 9.0) is at least 50 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description
Meclofenamate is a time-dependent, non-selective competitive inhibitor of COX-1 and -2. The IC\textsubscript{50} values for inhibition of human recombinant COX-1 and -2 are 1.5 and 9.7 µM, respectively for instantaneous inhibition. However, the IC\textsubscript{50} is much lower if pre-incubated with the enzyme.\textsuperscript{1}

Reference

WARNING: This product is for laboratory research only; not for administration to humans. Not for human or veterinary diagnostic or therapeutic use.

SAFETY DATA
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent our email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals herein. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery. Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence. This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer’s exclusive remedy and Cayman’s sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman’s option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.