

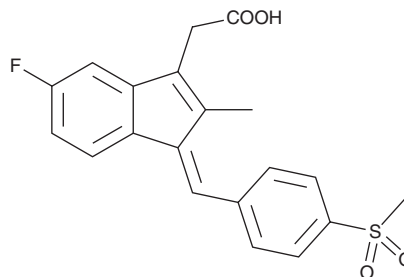
PRODUCT INFORMATION



Sulindac sulfone

Item No. 16805

CAS Registry No.: 59864-04-9
Formal Name: 5-fluoro-2-methyl-1-[[4-(methylsulfonyl)phenyl]methylene]-1H-indene-3-acetic acid
Synonym: Exisulind
MF: C₂₀H₁₇FO₄S
FW: 372.4
Purity: ≥98%
UV/Vis.: λ_{max}: 231, 283, 330 nm
Supplied as: A crystalline 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

Sulindac sulfone is supplied as a crystalline solid. A stock solution may be made by dissolving the sulindac sulfone in the solvent of choice, which should be purged with an inert gas. Sulindac sulfone is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of sulindac sulfone in ethanol is approximately 2 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 sulindac sulfone can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of sulindac sulfone in PBS (pH 7.2) is approximately 0.05 mg/ml. For maximum solubility in aqueous buffers, sulindac sulfone should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Sulindac sulfone has a solubility of approximately 0.15 mg/ml in a 1:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Sulindac (Item No. 10004386) is a non-steroidal anti-inflammatory drug that has an extensive epidemiology documenting reduced human colorectal cancer. In mouse models, sulindac was found not only to inhibit the enzymatic activity of polyp-associated COX-2, but also to downregulate the expression of colonic COX-2 protein to control levels.¹ Sulindac sulfone is an oxidized metabolite of sulindac that is produced in many mammals but minimally in mice and rats.^{2,3} It is generally considered to be inactive against COX enzymes, although it can reduce azoxymethane-induced colon cancer in rats.^{4,5} Sulindac sulfone inhibits aldose reductase (IC₅₀ = 367 nM) *in vitro* and may contribute to the beneficial pharmacological effects of sulindac on type 2 diabetic complications.⁶

References

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3. Brunell, D., Sagher, D., Kesaraju, S., *et al. Drug Metab. Dispos.* **39(6)**, 1014-1021 (2011).
4. Babbar, N., Ignatenko, N.A., Casero, R.A., Jr., *et al. J. Biol. Chem.* **278(48)**, 47762-47775 (2003).
5. Piazza, G.A., Alberts, D.S., Hixson, L.J., *et al. Cancer Res.* **57(14)**, 2909-2915 (1997).
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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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