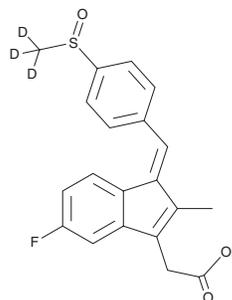


PRODUCT INFORMATION



Sulindac-d₃ Item No. 33381

Formal Name: 5-fluoro-2-methyl-1Z-[[4-(methylsulfinyl-d₃)phenyl]methylene]-1H-indene-3-acetic acid
MF: C₂₀H₁₄D₃FO₃S
FW: 359.4
Chemical Purity: ≥98% (Sulindac)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₃); ≤1% d₀
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

Sulindac-d₃ is intended for use as an internal standard for the quantification of sulindac (Item No. 10004386) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Sulindac-d₃ is supplied as a solid. A stock solution may be made by dissolving the sulindac-d₃ in the solvent of choice, which should be purged with an inert gas. Sulindac-d₃ is soluble in methanol and DMSO.

Description

Sulindac is a non-steroidal anti-inflammatory drug (NSAID), selective COX-2 inhibitor (IC₅₀s = 0.79 and >1,000 μM for COX-2 and COX-1, respectively), and prodrug form of sulindac sulfide (Item No. 10004387).¹⁻⁴ Sulindac is reduced by intestinal bacteria to form sulindac sulfide.¹ It inhibits acetic acid-induced writhing in mice and reduces paw edema induced by carrageenan in rats when administered at a dose of 100 mg/kg.³ Sulindac (60 mg/kg) reduces tumor growth in MiaPaCa-2 and BxPC-3 mouse xenograft models.⁴ Formulations containing sulindac have been used in the treatment of pain associated with arthritis, ankylosing spondylitis, and gout.

References

1. Maseda, D. and Ricciotti, E. NSAID-gut microbiota interactions. *Front. Pharmacol.* **11**, 1153 (2020).
2. Grossman, C.J., Wiseman, J., Lucas, F.S., *et al.* Inhibition of constitutive and inducible cyclooxygenase activity in human platelets and mononuclear cells by NSAIDs and Cox 2 inhibitors. *Inflamm. Res.* **44(6)**, 253-257 (1995).
3. Bhat, M.A., Al-Omar, M.A., Alsaif, N.A., *et al.* Novel sulindac derivatives: Synthesis, characterisation, evaluation of antioxidant, analgesic, anti-inflammatory, ulcerogenic and COX-2 inhibition activity. *J. Enzyme Inhib. Med. Chem.* **35(1)**, 921-934 (2020).
4. Yip-Schneider, M.T., Wu, H., Ralstin, M., *et al.* Suppression of pancreatic tumor growth by combination chemotherapy with sulindac and LC-1 is associated with cyclin D1 inhibition *in vivo*. *Mol. Cancer Ther.* **6(6)**, 1736-1744 (2007).

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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