Product Information



Nimesulide

Item No. 70640

CAS Registry No.: 51803-78-2

Formal Name: N-(4-nitro-2-phenoxyphenyl)-

methanesulfonamide

Synonym:

MF: $C_{13}H_{12}N_2O_5S$ FW: 308.3

Stability: ≥1 year at -20°C Supplied as: A crystalline solid

Laboratory Procedures

Purity:

For long term storage, we suggest that nimesulide be stored as supplied at -20°C. It should be stable for at least one year. Nimesulide is supplied as a crystalline solid. A stock solution may be made by dissolving the nimesulide in an organic solvent purged with an inert gas. Nimesulide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of nimesulide in ethanol is 2.3 mg/ml, and is approximately 68 mg/ml in DMSO and

Nimesulide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, nimesulide should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Nimesulide has a solubility of approximately <200 µg/ml in a 10% DMSO in PBS (pH 7.2) solution using this method. We do not recommend storing the aqueous solution for more than one day.

Nimesulide is a selective inhibitor of COX-2. The IC_{50} values are 70 and 1.27 μ M for human recombinant COX-1 and -2 (at 20 μ M substrate concentration), respectively. For ovine COX-1 and -2 (at 100 μ M substrate concentration) the IC₅₀ values are 22 and 0.03 μ M, respectively.^{1,2}

References

- 1. Johnson, J.L., Wimsatt, J., Buckel, S.D., et al. Purification and characterization of prostaglandin H synthase-2 from sheep placental cotyledons. Arch. Biochem. Biophys. 324, 26-34 (1995).
- 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).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/70640

WARNING: This product is for laboratory research only: not for administration to humans. Not for human or veterinary DIAGNOSTIC OR THERAPEUTIC USE.

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 via email to your institution.

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Cayman Chemical

Mailing address

1180 E. Ellsworth Road Ann Arbor, MI 48108 USA

Phone

(800) 364-9897 (734) 971-3335

(734) 971-3640

custserv@caymanchem.com

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