

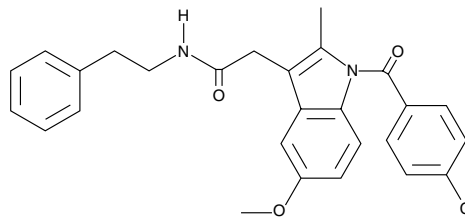
Product Information



N-(2-phenylethyl)-Indomethacin amide

Item No. 70272

CAS Registry No.: 261766-32-9
Formal Name: N-(2-phenylethyl)-1-(4-chlorobenzoyl)-5-methoxy-2-methyl-1H-indole-3-acetamide
Synonym: N-2PIA
MF: C₂₇H₂₅ClN₂O₃
FW: 461.0
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 260, 320 nm



Laboratory Procedures

N-(2-phenylethyl)-Indomethacin amide (N-2PIA) is a reversible, selective inhibitor of COX-2. For long term storage, we suggest that N-2PIA be stored as supplied at -20°C. It should be stable for at least one year.

N-2PIA is supplied as a crystalline solid. A stock solution may be made by dissolving the N-2PIA in an organic solvent purged with an inert gas. N-2PIA is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of N-2PIA in these solvents is approximately 800 µg/ml, 10 mg/ml, and 14 mg/ml, respectively. N-2PIA will be stable for at least six months in these solvents if stored at -20°C.

N-2PIA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, N-2PIA should first be dissolved in DMF and then diluted with the aqueous buffer of choice. N-2PIA has a solubility of approximately 8 mg/ml in a 7:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

N-2PIA is one of several aromatic amides of indomethacin recently reported to be potent and selective reversible inhibitors of COX-2.¹ N-2PIA inhibits human recombinant and ovine COX-2 with IC₅₀ values of 0.06 and 0.125 µM, respectively.^{1,2} It is over 400 times less potent as an inhibitor of human and ovine COX-1.

References

1. Kalgutkar, A.S., Marnett, A.B., Crews, B.C., *et al.* Ester and amide derivatives of the nonsteroidal antiinflammatory drug, indomethacin, as selective cyclooxygenase-2 inhibitors. *J. Med. Chem.* **43**, 2860-2870 (2000).
2. Johnson, J.L. [Unpublished] (1999).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/70272

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 via email to your institution.

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