

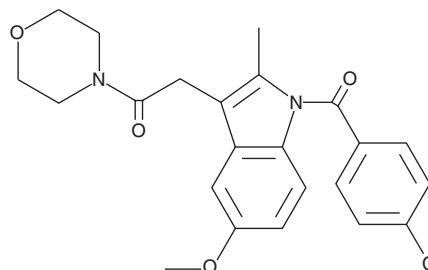
PRODUCT INFORMATION



IMMA

Item No. 70275

CAS Registry No.: 2854-32-2
Formal Name: 2-[1-(4-chlorobenzoyl)-5-methoxy-2-methyl-1H-indol-3-yl]-1-(4-morpholinyl)-ethanone
Synonyms: BML-190, Indomethacin Morpholinylamide, LM-4131
MF: C₂₃H₂₃ClN₂O₄
FW: 426.9
Purity: ≥98%
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

IMMA is supplied as a crystalline solid. A stock solution may be made by dissolving the IMMA in the solvent of choice, which should be purged with an inert gas. IMMA is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of IMMA in these solvents is approximately 1.25, 12.75, and 25 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 IMMA can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of IMMA in PBS, pH 7.2, is approximately 50 µg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

IMMA is a cannabinoid (CB) receptor 2 inverse agonist ($K_i = 435$ nM for recombinant human CB₂).^{1,2} It is selective for CB₂ over CB₁ receptors ($K_i = >20$ µM). IMMA (0.001-1 µM) reduces basal production of inositol phosphate and increases forskolin-induced accumulation of cAMP in HEK293 cells expressing human CB₂ receptors.² It inhibits LPS-induced nitric oxide (NO) and prostaglandin E₂ (PGE₂; Item No. 14010) production in J774 macrophages in a concentration-dependent manner.³

References

- Gallant, M., Dufresne, C., Gareau, Y., *et al.* New class of potent ligands for the human peripheral cannabinoid receptor. *Bioor. Med. Chem. Lett.* **6(19)**, 2263-2268 (1996).
- New, D.C. and Wong, Y.H. BML-190 and AM251 act as inverse agonists at the human cannabinoid CB₂ receptor: Signaling via cAMP and inositol phosphates. *FEBS Lett.* **536(1-3)**, 157-160 (2003).
- Chang, Y.-H., Lee, S.T., and Lin, W.-W. Effects of cannabinoids on LPS-stimulated inflammatory mediator release from macrophages: Involvement of eicosanoids. *J. Cell. Biochem.* **81(4)**, 715-723 (2001).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 04/02/2024

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM