

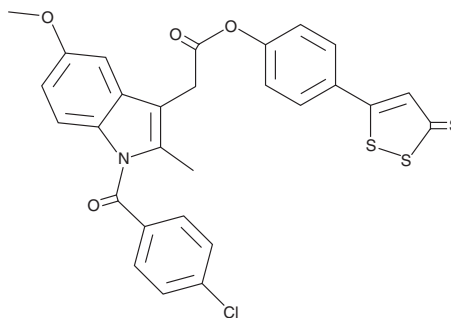
Product Information



ATB-343

Catalog No. 13045

CAS Registry No.: 1000700-26-4
Formal Name: 1-(4-chlorobenzoyl)-5-methoxy-2-methyl-4-(3-thioxo-3H-1,2-dithiol-5-yl)phenyl ester-1H-indole-3-acetic acid
MF: C₂₈H₂₀ClNO₄S₃
FW: 566.1
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

For long term storage, we suggest that ATB-343 be stored as supplied at -20°C. It should be stable for at least two years.

ATB-343 is supplied as a crystalline solid. A stock solution may be made by dissolving the ATB-343 in an organic solvent purged with an inert gas. ATB-343 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of ATB-343 in these solvents is approximately 10 mg/ml.

If aqueous stock solutions are required for biological experiments, they can best be prepared by diluting the organic solvent into aqueous buffers or isotonic saline. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Hydrogen sulfide (H₂S) is a naturally-occurring gasotransmitter with vasodilator and inflammatory modulating activity.¹ Non-steroidal anti-inflammatory drugs (NSAIDs), such as indomethacin, diclofenac, and ibuprofen, are some of the most commonly used anti-inflammatory drugs available but exhibit significant side effects, particularly gastric damage, when used chronically. ATB-343 is a hybrid molecule of an H₂S donor and the NSAID indomethacin. In rats, ATB-343 does not cause gastric damage or promote leukocyte adherence to vascular endothelium, effects which are observed with indomethacin treatment alone.² These results indicate that H₂S-releasing derivatives of NSAIDs may prove to be more effective anti-inflammatory agents than traditional NSAIDs alone.

References

1. Li, L. and Moore, P.K. Putative biological roles of hydrogen sulfide in health and disease: A breath of not so fresh air? *Trends Pharmacol. Sci.* **29**(2), 84-90 (2007).
2. Wallace, J.L. Hydrogen sulfide-releasing anti-inflammatory drugs. *Trends Pharmacol. Sci.* **28**(10), 501-505 (2007).

Related Products

ATB-337 - Cat. No. 10277 • β-cyano-L-Alanine - Cat. No. 10010947 • DL-Propargylglycine (hydrochloride) - Cat. No. 10010948

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL 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 Material Safety Data Sheet, which has been sent under separate cover to the MSDS supervisor at your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery.**

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

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