

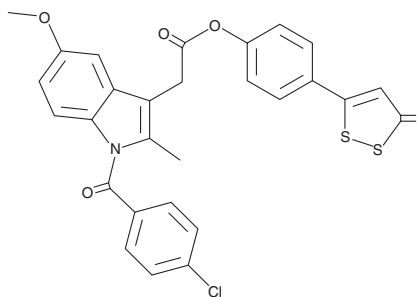
PRODUCT INFORMATION



ATB-343

Item No. 13045

CAS Registry No.: 1000700-26-4
Formal Name: 1-(4-chlorobenzoyl)-5-methoxy-2-methyl-1H-indole-3-acetic acid, 4-(3-thioxo-3H-1,2-dithiol-5-yl)phenyl ester
MF: C₂₈H₂₀ClNO₄S₃
FW: 566.1
Purity: ≥98%
UV/Vis.: λ_{max}: 321, 433 nm
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

ATB-343 is supplied as a crystalline solid. A stock solution may be made by dissolving the ATB-343 in the solvent of choice, which should be 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 and 20 mg/ml, respectively.

Description

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).

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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