

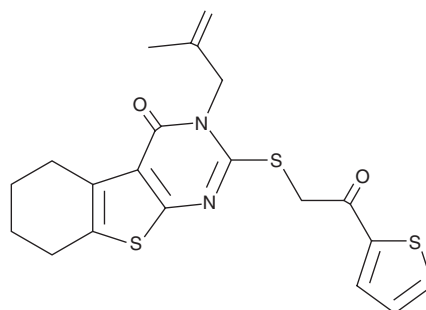
PRODUCT INFORMATION



Eggmanone

Item No. 17751

CAS Registry No.: 505068-32-6
Formal Name: 5,6,7,8-tetrahydro-3-(2-methyl-2-propen-1-yl)-2-[[2-oxo-2-(2-thienyl)ethyl]thio]-[1]benzothieno[2,3-d]pyrimidin-4(3H)-one
MF: C₂₀H₂₀N₂O₂S₃
FW: 416.6
Purity: ≥95%
UV/Vis.: λ_{max}: 250, 323 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

Eggmanone is supplied as a crystalline solid. A stock solution may be made by dissolving the eggmanone in the solvent of choice, which should be purged with an inert gas. Eggmanone is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of eggmanone in these solvents is approximately 0.5, 10, and 5 mg/ml, respectively.

Description

Type 4 cyclic nucleotide phosphodiesterase (PDE4) selectively inactivates the second messenger cAMP by hydrolyzing the phosphodiester bond, producing AMP. PDE4 has been reported to play a key regulatory role in Hedgehog signaling downstream of smoothed and, thus, represents a potential therapeutic target for Hedgehog-dependent cancers.¹ Eggmanone is a selective inhibitor of PDE4 (IC₅₀ = 72 nM) that antagonizes the Hedgehog signaling pathway.¹ It demonstrates 40- to 50-fold lower potency at PDE3, PDE10, and PDE11 (IC₅₀s = 3, 3.05, and 4.08 μM, respectively).¹ Inhibition of PDE4 activity *via* eggmanone was shown to activate localized protein kinase A signaling, which, in turn, regulates Gli processing and translocation.¹

Reference

1. Williams, C.H., Hempel, J.E., Hao, J., *et al.* An *in vivo* chemical genetic screen identifies phosphodiesterase 4 as a pharmacological target for hedgehog signaling inhibition. *Cell Rep.* **11(1)**, 43-50 (2015).

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

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