

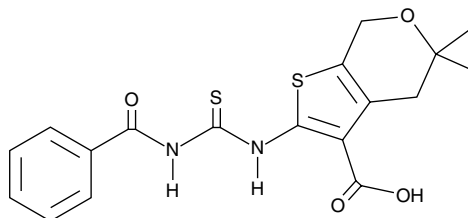
Product Information



CID-1067700

Item No. 15194

CAS Registry No.: 314042-01-8
Formal Name: 2-[[[(benzoylamino)thioxomethyl]amino]-4,7-dihydro-5,5-dimethyl-5H-thieno[2,3-c]pyran-3-carboxylic acid
Synonym: ML-282
MF: C₁₈H₁₈N₂O₄S₂
FW: 390.5
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 238, 291, 361 nm



Laboratory Procedures

For long term storage, we suggest that CID-1067700 be stored as supplied at -20°C. It should be stable for at least two years.

CID-1067700 is supplied as a crystalline solid. A stock solution may be made by dissolving the CID-1067700 in the solvent of choice. CID-1067700 is soluble in DMSO at a concentration of approximately 10 mg/ml.

The Ras family of GTPases, including the Arf, Rho, Ras, and Rab GTPase subfamilies, regulates various cellular processes ranging from membrane trafficking to the control of cell proliferation. They regulate cell physiology by switching between active and inactive conformational states by binding either GTP or GDP. Alterations in GTPase function are a known hallmark of certain cancers and genetic diseases. CID-1067700 is one of the first identified competitive inhibitors of nucleotide binding by Ras-related GTPases.¹ It binds the nucleotide binding pocket of Rab7 with a K_i value of 13 nM, preventing BODIPY-linked GTP and GDP binding with EC₅₀ values of 11.2 and 21 nM, respectively.¹

Reference

1. Agola, J.O., Hong, L., Surviladze, Z., *et al.* A competitive nucleotide binding inhibitor: *In vitro* characterization of Rab7 GTPase inhibition. *ACS Chem. Biol.* **7**(6), 1095-1108 (2012).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/15194

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.

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.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's exclusive remedy and Cayman's sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman's option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.

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