

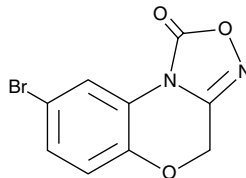
Product Information



NS-2028

Item No. 81600

CAS Registry No.: 204326-43-2
Formal Name: 8-bromo-1H,4H-[1,2,4]oxadiazolo
[3,4-c][1,4]benzoxazin-1-one
MF: C₉H₅BrN₂O₃
FW: 269.1
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 218, 287 nm



Laboratory Procedures

For long term storage, we suggest that NS-2028 be stored as supplied at -20°C. It should be stable for at least one year. NS-2028 is supplied as a crystalline solid. A stock solution may be made by dissolving the NS-2028 in an organic solvent purged with an inert gas. NS-2028 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of NS-2028 in these solvents is approximately 2 mg/ml.

NS-2028 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, NS-2028 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. NS-2028 has a solubility of approximately 5 µg/ml in a 10:90 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

NS-2028 is a specific inhibitor of soluble guanylyl cyclase. It inhibits purified bovine lung guanylyl cyclase in a concentration-dependent and irreversible manner with IC₅₀ values of 30 and 200 nM for basal and NO-stimulated enzymes, respectively.¹ S-nitroso-glutathione-enhanced guanylyl cyclase activity in mouse cerebellum homogenates is inhibited by NS-2028 with an IC₅₀ value of 17 nM. NS-2028 is about 4.7-fold more potent than ODQ, which has an IC₅₀ value of 80 nM for inhibition of soluble guanylyl cyclase in the same assay.¹ NS-2028 does not inhibit particulate guanylyl cyclase or adenylyl cyclase.

Reference

1. Olesen, S., Drejer, J., Axelsson, O., *et al.* Characterization of NS 2028 as a specific inhibitor of soluble guanylyl cyclase. *Br.J.Pharmacol.* **123**, 299-309 (1998).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/81600

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.

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