

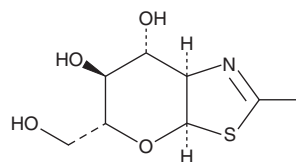
PRODUCT INFORMATION



NAG-thiazoline

Item No. 34044

CAS Registry No.: 179030-22-9
Formal Name: (3aR,5R,6S,7R,7aR)-3a,6,7,7a-tetrahydro-5-(hydroxymethyl)-2-methyl-5H-pyrano[3,2-d]thiazole-6,7-diol
Synonym: GlcNAc-thiazoline
MF: C₈H₁₃NO₄S
FW: 219.3
Purity: ≥98%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

NAG-thiazoline is supplied as a solution in ethanol. To change the solvent, simply evaporate the NAG-thiazoline under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of NAG-thiazoline in these solvents is approximately 25, and 30 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of NAG-thiazoline is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of NAG-thiazoline in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

NAG-thiazoline is an inhibitor of O-GlcNAcase (OGA; K_i = 180 nM).¹ It is active against *V. campbellii* (MIC = 0.5 μM).²

References

1. Macauley, M.S. and Vocadlo, D.J. Increasing O-GlcNAc levels: An overview of small-molecule inhibitors of O-GlcNAcase. *Biochim. Biophys. Acta* **1800(2)**, 107-121 (2010).
2. Meekrathok, P., Stubbs, K.A., Aunkham, A., *et al.* NAG-thiazoline is a potent inhibitor of the *Vibrio campbellii* GH20 β-N-acetylglucosaminidase. *FEBS J.* **287(22)**, 4982-4995 (2020).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/24/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM