

PRODUCT INFORMATION

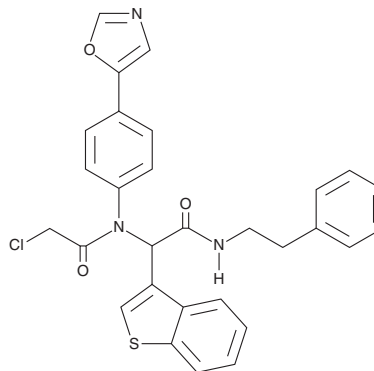


GPX4 Inhibitor 26a

Item No. 35408

CAS Registry No.: 2761004-85-5
Formal Name: α-[(2-chloroacetyl)[4-(5-oxazolyl)phenyl]amino]-N-(2-phenylethyl)-benzo[b]thiophene-3-acetamide
Synonyms: Glutathione Peroxidase 4 Inhibitor 26a, GPX4-IN-3, PHGPx Inhibitor 26a, Phospholipid Hydroperoxide Glutathione Peroxidase Inhibitor 26a

MF: C₂₉H₂₄ClN₃O₃S
FW: 530.0
Purity: ≥98%
UV/Vis.: λ_{max}: 269 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

GPX4 inhibitor 26a is supplied as a crystalline solid. A stock solution may be made by dissolving the GPX4 inhibitor 26a in the solvent of choice, which should be purged with an inert gas. GPX4 inhibitor 26a is soluble in chloroform.

Description

GPX4 inhibitor 26a is an inhibitor of glutathione peroxidase 4 (GPX4).¹ It inhibits GPX4 activity by 71.7% at 1 μM. GPX4 inhibitor 26a is cytotoxic to 4T1 and MCF-7 breast cancer cells and HT-1080 fibrosarcoma cells (IC₅₀s = 0.78, 6.9, and 0.15 μM, respectively). It decreases intracellular glutathione (GSH) levels and induces lipid peroxidation and ferroptosis in 4T1 cells when used at a concentration of 5 μM. GPX4 inhibitor 26a (15 and 30 mg/kg) reduces tumor growth in a 4T1 mouse xenograft model.

Reference

1. Xu, C., Xiao, Z., Wang, J., *et al.* Discovery of a potent glutathione peroxidase 4 inhibitor as a selective ferroptosis inducer. *J. Med. Chem.* **64**(18), 13312-13326 (2021).

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, 10/06/2023

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