

PRODUCT INFORMATION



WS-383

Item No. 45391

CAS Registry No.: 2247544-02-9

Formal Name: 5-[[2-[[[4-chlorophenyl)methyl]thio]-5-methyl[1,2,4]triazolo[1,5-a]pyrimidin-7-yl]thio]-N,N-dimethyl-1H-tetrazole-1-ethanamine, monohydrochloride

MF: C₁₈H₂₀ClN₉S₂ • HCl

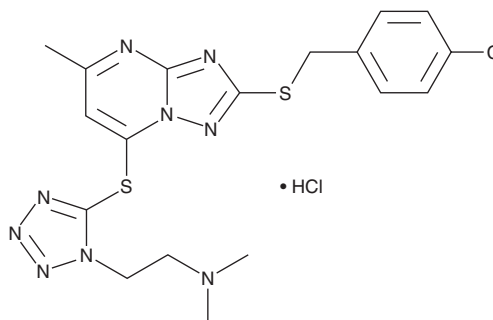
FW: 498.5

Purity: ≥98%

Supplied as: A 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

WS-383 is supplied as a solid. A stock solution may be made by dissolving the WS-383 in the solvent of choice, which should be purged with an inert gas. WS-383 is slightly soluble (0.1-1 mg/ml) in acetonitrile:water (1:1).

Description

WS-383 is an inhibitor of the protein-protein interaction between DCN1-like protein 1 (DCNL1) and ubiquitin-conjugating enzyme 12 (UBC12; IC₅₀ = 11 nM in a cell-free assay).¹ It selectively inhibits NEDDylation of the DCNL-1 targets and ubiquitin ligase complex components cullin-3 and -1 over other cullin proteins and increases levels of the cullin-RING ligase complex (CRL) targets p21, p27, and Nrf2 in MGC803 gastric cancer cells at 10 μM. WS-383 inhibits cell growth and migration and induces cell cycle arrest at the G₂/M phase and apoptosis in MGC803 cells. It decreases tumor size in an MGC803 mouse xenograft model when administered at doses of 25 or 50 mg/kg. WS-383 also inhibits lysine-specific demethylase 1 (LSD1) activity in a cell-free assay (IC₅₀ = 288 nM).²

References

1. Wang, S., Zhao, L., Shi, X.-J., *et al.* Development of highly potent, selective, and cellular active triazolo [1,5-a]pyrimidine-based inhibitors targeting the DCN1-UBC12 protein-protein interaction. *J. Med. Chem.* **62**(5), 2772-2797 (2019).
2. Song, Z., Gao, K., Asmamaw, M. D., *et al.* Discovery of the antitumor activities of a potent DCN1 inhibitor compound 383 targeting LSD1 in gastric cancer. *Eur. J. Pharmacol.* **916**, 174725 (2022).

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, 05/04/2026

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