

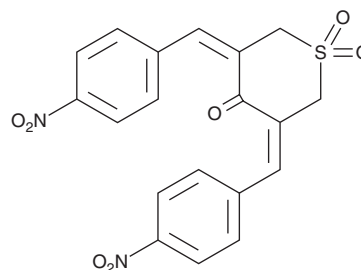
PRODUCT INFORMATION



Ubiquitin Isopeptidase Inhibitor I

Item No. 21006

CAS Registry No.: 108477-18-5
Formal Name: tetrahydro-3,5-bis[(4-nitrophenyl)methylene]-4H-thiopyran-4-one, 1,1-dioxide
Synonym: NSC 144303
MF: C₁₉H₁₄N₂O₇S
FW: 414.4
Purity: ≥98%
UV/Vis.: λ_{max}: 319 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

Ubiquitin isopeptidase inhibitor I is supplied as a crystalline solid. A stock solution may be made by dissolving the ubiquitin isopeptidase inhibitor I in the solvent of choice, which should be purged with an inert gas. Ubiquitin isopeptidase inhibitor I is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of ubiquitin isopeptidase inhibitor I in these solvents is approximately 15 and 1 mg/ml, respectively.

Ubiquitin isopeptidase inhibitor I is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ubiquitin isopeptidase inhibitor I should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Ubiquitin isopeptidase inhibitor I has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Ubiquitin isopeptidase inhibitor I induces caspase activation and apoptosis (IC₅₀ = ~1.7 μM) through a Bcl-2-dependent and apoptosome-independent mitochondrial pathway that selectively inhibits ubiquitin isopeptidase activity (IC₅₀ = ~30 μM).¹ It has also been shown to induce necrosis in apoptosis-resistant DKO cells.²

References

1. Aleo, E., Henderson, C.J., Fontanini, A., *et al.* Identification of new compounds that trigger apoptosome-independent caspase activation and apoptosis. *Cancer Research* **66(18)**, 9235-9244 (2006).
2. Fontanini, A., Foti, C., Potu, H., *et al.* The isopeptidase inhibitor G5 triggers a caspase-independent necrotic death in cells resistant to apoptosis: A comparative study with the proteasome inhibitor bortezomib. *J. Biol. Chem.* **284(13)**, 8369-8381 (2009).

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, 11/12/20226

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