PRODUCT INFORMATION



TCID

Item No. 16353

CAS Registry No.: 30675-13-9

Formal Name: 4,5,6,7-tetrachloro-1H-indene-

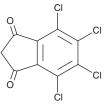
1,3(2H)-dione

Synonym: **UCH-L3** Inhibitor

MF: $C_9H_2CI_4O_2$ FW: 283.9 **Purity:** ≥95% UV/Vis.: λ_{max} : 244 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

TCID is supplied as a crystalline solid. A stock solution may be made by dissolving the TCID in the solvent of choice, which should be purged with an inert gas. TCID is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of TCID in these solvents is approximately 10 and 15 mg/ml, respectively.

Description

Ubiquitin carboxyl-terminal hydrolase isozyme L3 (UCH-L3) is a deubiquitinating enzyme and thiol-dependent hydrolase. 1-4 TCID is a tetrachloro indandione that acts as a potent inhibitor of UCH-L3 and demonstrates 125-fold selectivity over UCH-L1 (IC₅₀s = 0.6 and 75 μ M, respectively).⁵

References

- 1. Mason, D.E., Ek, J., Peters, E.C., et al. Substrate profiling of deubiquitin hydrolases with a positional scanning library and mass spectrometry. Biochemistry 43(21), 6535-6544 (2004).
- 2. Setsuie, R., Sakurai, M., Sakaguchi, Y., et al. Ubiquitin dimers control the hydrolase activity of UCH-L3. Neurochem. Int. 54(5-6), 314-321 (2009).
- 3. Wada, H., Kito, K., Caskey, L.S., et al. Cleavage of the C-terminus of NEDD8 by UCH-L3. Biochem. Biophys. Res. Commun. 251(3), 668-692 (1998).
- 4. Iphöfer, A., Kummer, A., Nimtz, M., et al. Profiling ubiquitin linkage specificities of deubiquitinating enzymes with branched ubiquitin isopeptide probes. Chembiochem 13(10), 1416-1420 (2012).
- 5. Liu, Y., Lashuel, H.A., Choi, S., et al. Discovery of inhibitors that elucidate the role of UCH-L1 activity in the H1299 lung cancer cell line. Chem. Biol. 10(9), 837-846 (2003).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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

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

Copyright Cayman Chemical Company, 12/21/2022

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