

## Product Specification Sheet

**Product Name:** LDN-57444

**Catalog Number:** C5574

**Technical information:**

Chemical Formula:  $C_{17}H_{11}Cl_3N_2O_3$

CAS #: 668467-91-2

Molecular Weight: 397.64

Purity: > 98%

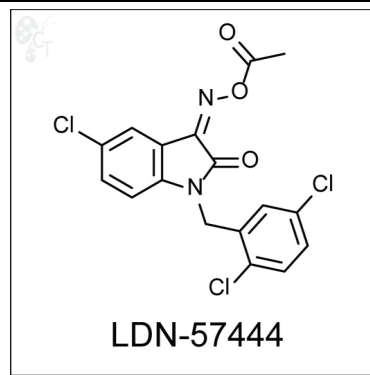
Appearance: Yellow solid

Solubility: Soluble in DMSO up to 25 mM

Chemical Name: 1H-Indole-2,3-dione, 5-chloro-1-[(2,5-dichlorophenyl)methyl]-, 3-(O-acetyloxime)

Storage: For longer shelf life, store solid powder or DMSO solution at -20°C desiccated.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.



- Handling:**
- To make 10 mM stock solution, add 0.251 mL of DMSO for each mg of LDN-57444.
  - For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

**Biological Activity:** LDN-57444 is a specific inhibitor ( $K_i = 0.4 \mu\text{M}$ ) against Ubiquitin carboxy-terminal hydrolase L1 (UCH-L1), a member of deubiquitinating enzymes (DUBs). LDN-57444 increased proliferation of SH-SY5Y cells, a UCH-L1-expressing neuroblastoma line. [1]

As expression of UCH-L1 is highly specific to neurons and to cells of the diffuse neuroendocrine system and their tumors, LDN-57444 is a useful tool for studying the roles of UCH-L1 in Alzheimer's disease, Parkinson's disease, and other neurological disorders. [2,3]

- Reference:**
1. Liu Y, et al. Discovery of inhibitors that elucidate the role of UCH-L1 activity in the H1299 lung cancer cell line. *Chem Biol.* 2003; 10(9):837-46. Pubmed ID: 14522054
  2. Cartier AE, et al. Regulation of synaptic structure by ubiquitin C-terminal hydrolase L1. *J Neurosci.* 2009; 29(24):7857-68. Pubmed ID: 19535597
  3. Zhang M, et al. Control of BACE1 degradation and APP processing by ubiquitin carboxyl-terminal hydrolase L1. *J Neurochem.* 2012; 120(6):1129-38. Pubmed ID: 22212137

To reorder: <http://www.cellagentech.com/LDN-57444/>

For Technical Support: [technical@cellagentech.com](mailto:technical@cellagentech.com)

*Chemicals are sold for research use only, not for clinical or diagnostic use.*