

## LDN-57444

Cat. # F2104-5, F2104-25

**Also Known as:** LDN57444  
**Formula:**  $C_{17}H_{11}Cl_3N_2O_3$   
**MW:** 397.6 Da  
**CAS No.:** 668467-91-2  
**Source:** Synthetic  
**Form:** Lyophilized Powder  
**Solubility:** Soluble in DMSO  
**Concentration:** N/A  
**Quality Assurance:** > 98% by HPLC and NMR

**Description:** LDN-57444 is a potent small chemical inhibitor of ubiquitin C-terminal hydrolase-L1 (UCH-L1,  $IC_{50} = 0.88 \mu M$ ). UCHL1 functions to generate free ubiquitin from ubiquitin precursors. Loss of UCH-L1 activity causes apoptosis due to an impaired ubiquitin-proteasome pathway. LDN-57444-induced reduction of free ubiquitin could increase spine size while decreasing spine density in hippocampal neurons.

Preparing stock solution in DMSO up to 10 mg/ml. Typical working concentration range is 5 - 25  $\mu M$ .

**Storage:** Eligible for room temperature shipping. Store at  $-20^{\circ}C$  or  $-80^{\circ}C$  upon receiving; avoid multiple freeze-thaw cycles after dissolving in DMSO.

**Literature:**

1. Cartier A.E., et al., J. Neuroscience, 2009, 29, 7857.
2. Liu Y., et al., Chem. & Biol. 2003, 10, 837.