

# PRODUCT INFORMATION



## USP28-IN-4

Item No. 41604

**CAS Registry No.:** 2931509-15-6  
**Formal Name:** 2-chloro-N-[4-chloro-3-(2,3-dihydro-1H-isoindol-5-yl)phenyl]-4-(methylsulfonyl)-benzamide

**Synonyms:** Ubiquitin-specific Protease 28-IN-4,  
Ubiquitin-specific Protease 28 Inhibitor 4,  
USP28 Inhibitor 4

**MF:** C<sub>22</sub>H<sub>18</sub>Cl<sub>2</sub>N<sub>2</sub>O<sub>3</sub>S

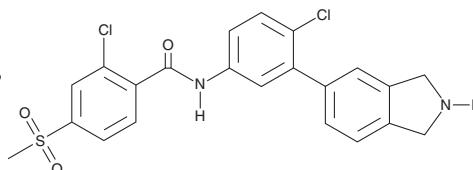
**FW:** 461.4

**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

USP28-IN-4 is supplied as a solid. A stock solution may be made by dissolving the USP28-IN-4 in the solvent of choice, which should be purged with an inert gas. USP28-IN-4 is sparingly soluble (1-10 mg/ml) in DMSO.

### Description

USP28-IN-4 is an inhibitor of ubiquitin-specific protease 28 (USP28; IC<sub>50</sub> = 0.04 μM).<sup>1</sup> It is selective for USP28 over USP2, USP7, USP8, USP9x, ubiquitin C-terminal hydrolase L3 (UCH-L3), and UCH-L5 at 5 μM but does inhibit USP25 at the same concentration. USP28-IN-4 reduces the levels of the USP28 substrate c-Myc in HCT116 and LS 174T colorectal cancer cells when used at concentrations of 80 and 60 μM, respectively, and reduces the viability of the same cells (IC<sub>50</sub>s = 38.11 and 24.3 μM, respectively). It also reduces the levels of the USP25 substrate tankyrase 1/2 in HCT116 and LS 174T cells.

### Reference

1. Zhou, D., Xu, Z., Huang, Y., *et al.* Structure-based discovery of potent USP28 inhibitors derived from Vismodegib. *Eur. J. Med. Chem.* **254**, 115369 (2023).

#### 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.

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