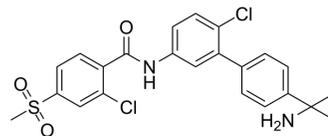


USP28-IN-2

Cat. No.:	HY-149228
CAS No.:	2931509-11-2
Molecular Formula:	C ₂₃ H ₂₀ Cl ₂ N ₂ O ₃ S
Molecular Weight:	475.39
Target:	Deubiquitinase
Pathway:	Cell Cycle/DNA Damage
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	USP28-IN-2 is a USP28 inhibitor (IC ₅₀ =0.3 μM) with high selectivity over USP2, USP7, USP8, USP9x, UCHL3 and UCHL5. USP28-IN-2 shows cytotoxicity against cancer cells, down-regulates the cellular level of c-Myc through ubiquitin-proteasome system. USP28-IN-2 also decreases the ankyrase-1/2 level in vitro. USP28-IN-2 enhance the sensitivity of colorectal cancer cells to Regorafenib (HY-10331) ^[1] .								
IC₅₀ & Target	USP28 0.3 μM (IC ₅₀)								
In Vitro	<p>USP28-IN-2 (compound 9l) (15 μM, 17.5 μM; 3 d) inhibits colony formation of human colorectal cancer cells HCT116 (17.5 μM) and Ls174T (15 μM)^[1].</p> <p>USP28-IN-2 (20-80 μM; 24 h) down-regulates the level of c-Myc by enhancing its degradation via ubiquitin-proteasome system (UPS)^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Western Blot Analysis^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>Human colorectal cancer cells HCT116 and Ls174T</td> </tr> <tr> <td>Concentration:</td> <td>20 μM, 30 μM, 50 μM, and 60 μM, for Ls174T; 30 μM, 50 μM, 60 μM and 80 μM for HCT116</td> </tr> <tr> <td>Incubation Time:</td> <td>24 h</td> </tr> <tr> <td>Result:</td> <td>Dose-dependently down-regulated the cellular level of c-Myc.</td> </tr> </table>	Cell Line:	Human colorectal cancer cells HCT116 and Ls174T	Concentration:	20 μM, 30 μM, 50 μM, and 60 μM, for Ls174T; 30 μM, 50 μM, 60 μM and 80 μM for HCT116	Incubation Time:	24 h	Result:	Dose-dependently down-regulated the cellular level of c-Myc.
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Result:	Dose-dependently down-regulated the cellular level of c-Myc.								

REFERENCES

[1]. Zhou D, et al. Structure-based discovery of potent USP28 inhibitors derived from Vismodegib. Eur J Med Chem. 2023 Jun 5;254:115369.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA