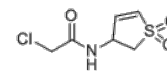


Product Name : UFSP2 inhibitor compound-8
Cat. No. : PC-20117
CAS No. : 850188-43-1
Molecular Formula : C₆H₈ClNO₃S
Molecular Weight : 209.64
Target : Other Targets
Solubility : 10 mM in DMSO



Biological Activity

UFSP2 inhibitor compound-8 is a small molecule covalent inhibitor of **UFSP2** (UFM1 Specific Peptidase 2), binds to Cys294 of UFSP2, promotes the protein modification by Ubiquitin-fold modifier 1 (UFM1) (UFMylation) of PD-L1 and destabilizes PD-L1.

Compound-8 (5 µg/mL) could significantly and consistently improve the global UFMylation activity in both MDA-MB-231 and MC38 cells.

Compound-8 (5-15 µg/mL) decreased the expression of PD-L1 without affecting the UFSP2 protein levels.

Compound-8 dose dependently enhanced the global UFMylation proteins while decreasing the expression of PD-L1.

Compound-8 imparts tumor immune evasion in vivo, exhibits better antitumor effect with no appreciable body weight loss when combined with PD-1 blockade.

UFSP2 is the primary "de-UFMylation" enzyme in human cells, UFSP2 acts as a de-UFMylation enzyme for PD-L1 through direct physical interaction.

References

Zhou J, et al. *Proc Natl Acad Sci U S A*. 2023 Mar 14;120(11):e2215732120.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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