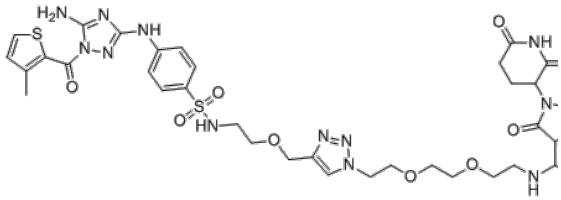
ProbeChem®
Expedite Your Scientific Research

WWW.PROBECHEM.COM

Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	CDK2 degrader CPS2
Cat. No.	:	PC-49057
CAS No.	:	2756741-90-7
Molecular Formula	:	$C_{38}H_{42}N_{12}O_{10}S_2$
Molecular Weight	:	890.948
Target	:	PROTAC
Solubility	:	10 mM in DMSO



Biological Activity

CDK2 degrader CPS2 is a potent, selective **CDK2 degarder** (PROTAC) with IC50 of 24 nM, potently and specifically induces CDK2 degradation in various cancer cell lines (MDA-MB-231, DC50=8 nM; MV-4-11, DC50=1 nM).
CPS2 induced ubiquitination led to CDK2 degradation via the ubiquitin/proteasome system, this degradation required the binding of CPS2 to CDK2 and CRBN.
CPS2 did not directly perturb the other CDK proteins (such as CDK1, 4, 5, 6, 7, 8 and 9) under subnanomolar concentration conditions.
CPS2 induced AML cell differentiation, increased CD11b expression in a concentration-dependent manner in the NB4 cells, also promoted ATRA-induced CD11b upregulation in the HL60 cells.
CPS2 inhibited the proliferation of hematopoietic stem cells (HSCs) without inducing cytotoxicity, CPS2 also induced granulocytic differentiation of HSCs.

References

Wang L, et al. ***Nat Chem Biol.*** 2021 May;17(5):567-575.

E-mail: tech@probechem.com