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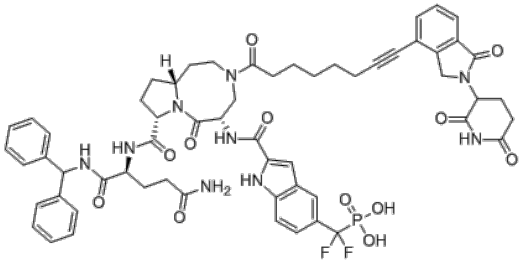
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	SD-36
Cat. No.	:	PC-73109
CAS No.	:	2429877-44-9
Molecular Formula	:	$C_{59}H_{62}F_2N_9O_{12}P$
Molecular Weight	:	1157.422
Target	:	PROTAC
Solubility	:	10 mM in DMSO



Biological Activity

SD-36 (STAT3 degrader SD-36) is a potent, selective **STAT3** degrader (PROTAC), potently induces the degradation of STAT3 protein in vitro and in vivo.
SD-36 is designed using an analogue of CRBN ligand lenalidomide and the STAT3 inhibitor SI-109, binds to recombinant STAT3 protein with Ki of 11 nM.
SD-36 (250 nM) depleted >90% of STAT3 protein in MOLM-16 cells after 4 hr treatment and >50% of STAT3 protein in DEL, KI-JK and SU-DHL-1 cells after 7 hr treatment, also efficiently degraded STAT3 protein in murine cells.
SD-36 displays extremely high cellular selectivity for degradation of STAT3 over other STATs.
SD-36 effectively degrades both wild-type and mutated STAT3 proteins in cells, effectively degrades mutated STAT3 (D661Y, K658R mutant), also effectively degrades CRISPR-mutated homozygous Y705F mutant STAT3 protein in DLD-1/STAT3Y705F/Y705F cells.
SD-36 displayed strong growth-inhibitory activities in a subset of leukemia and lymphoma cell lines (MOLM-16 cell line IC50, 35 nM), 100-fold more potent than SI-109.
SD-36 (i.v. 25 mg/kg) effectively and selectively depletes STAT3 protein, achieves complete and long-lasting tumor regression in in mouse xenograft tumors.

References

Bai L, et al. ***Cancer Cell***. 2019 Nov 11;36(5):498-511.e17.

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