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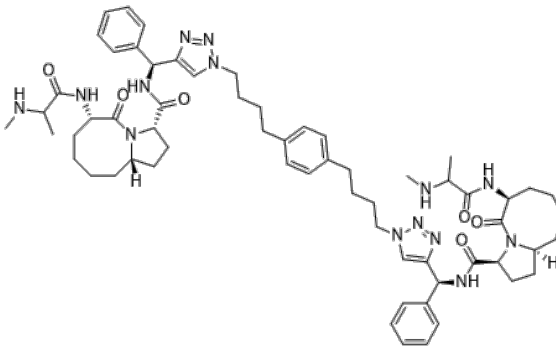
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	SM-164
Cat. No.	:	PC-26629
CAS No.	:	957135-43-2
Molecular Formula	:	$C_{62}H_{84}N_{14}O_6$
Molecular Weight	:	1121.45
Target	:	IAP
Solubility	:	10 mM in DMSO



Biological Activity

SM-164 is a potent, nonpeptide, cell-permeable, bivalent Smac mimetic binds to XIAP protein containing both the BIR2 and BIR3 domains with IC50 of 1.39 nM, also binds to cIAP-1 and cIAP-2 BIR3 with Ki of 0.31 and 1.1 nM.
SM-164 concurrently interacts with both BIR domains in XIAP and functions as an ultrapotent antagonist of XIAP in both cell-free functional and cell-based assays.
SM-164 targets cellular XIAP and effectively induces apoptosis at concentrations as low as 1 nM in the HL-60 leukemia cell line.
SM-164 induces caspase-8– and caspase-3–dependent apoptosis in cancer cells.
SM-164 induces TNFα-dependent apoptosis and cIAP-1 degradation in MDA-MB-231 cells.
SM-164 rapidly degrades cIAP-1 and displays strong in vivo antitumor activity in MDA-MB-231 xenograft model in mice.

References

Lu J, et al. Cancer Res. 2008 Nov 15;68(22):9384-93.

Sun H, et al. J Am Chem Soc. 2007 Dec 12;129(49):15279-94.

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