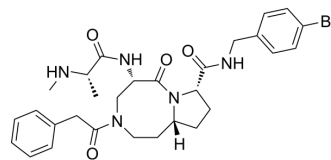


## SM-1295

<b>Cat. No.:</b>	HY-124181
<b>CAS No.:</b>	1562375-46-5
<b>Molecular Formula:</b>	C <sub>29</sub> H <sub>36</sub> BrN <sub>5</sub> O <sub>4</sub>
<b>Molecular Weight:</b>	598.53
<b>Target:</b>	IAP; Apoptosis
<b>Pathway:</b>	Apoptosis
<b>Storage:</b>	-20°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 310 mg/mL (517.94 mM; Need ultrasonic)					
	<b>Preparing Stock Solutions</b>	<b>Solvent</b>	<b>Mass</b>	<b>1 mg</b>	<b>5 mg</b>	<b>10 mg</b>
		<b>Concentration</b>				
		<b>1 mM</b>		1.6708 mL	8.3538 mL	16.7076 mL
		<b>5 mM</b>		0.3342 mL	1.6708 mL	3.3415 mL
	<b>10 mM</b>		0.1671 mL	0.8354 mL	1.6708 mL	
Please refer to the solubility information to select the appropriate solvent.						
<b>In Vivo</b>	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 7.75 mg/mL (12.95 mM); Clear solution  2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 7.75 mg/mL (12.95 mM); Clear solution					

### BIOLOGICAL ACTIVITY

<b>Description</b>	SM-1295 is an inhibitor of apoptosis protein (IAP) antagonist, with K <sub>d</sub> values of 3077 nM, 3.2 nM and 9.5 nM for XIAP-BIR3, c-IAP1-BIR3 and c-IAP2-BIR3, respectively <sup>[1][2]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	Kd: 3077 nM (XIAP-BIR3), 3.2 nM (c-IAP1-BIR3), 9.5 nM (c-IAP2-BIR3) <sup>[2]</sup> .
<b>In Vitro</b>	SM-1295 (compound 5) binds to both cIAP1 and cIAP2 proteins with K <sub>i</sub> values of <10 nM and displays a selectivity of >900-fold for cIAP1 over XIAP <sup>[1]</sup> . SM-1295 (compound 5) exhibits an IC <sub>50</sub> of 46 nM in MDA-MB-231 <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

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- [1]. Haiying Sun, et al. Potent and Selective Small-Molecule Inhibitors of cIAP1/2 Proteins Reveal That the Binding of Smac Mimetics to XIAP BIR3 Is Not Required for Their Effective Induction of Cell Death in Tumor Cells. *ACS Chem Biol.* 2014 Apr 18;9(4):994-1002.
- [2]. Hui Cong, et al. Inhibitor of Apoptosis Protein (IAP) Antagonists in Anticancer Agent Discovery: Current Status and Perspectives. *J Med Chem.* 2019 Jun 27;62(12):5750-5772.
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**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](mailto:tech@MedChemExpress.com)

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