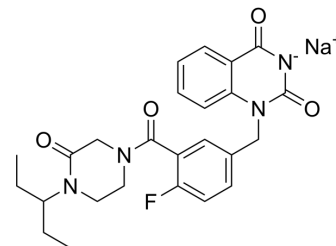


## PARP7-IN-16

<b>Cat. No.:</b>	HY-156419
<b>CAS No.:</b>	2435657-10-4
<b>Molecular Formula:</b>	C <sub>25</sub> H <sub>26</sub> FN <sub>4</sub> NaO <sub>4</sub>
<b>Molecular Weight:</b>	488.49
<b>Target:</b>	PARP
<b>Pathway:</b>	Cell Cycle/DNA Damage; Epigenetics
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 100 mg/mL (204.71 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>		2.0471 mL	10.2356 mL	20.4712 mL
		<b>5 mM</b>		0.4094 mL	2.0471 mL	4.0942 mL
	<b>10 mM</b>		0.2047 mL	1.0236 mL	2.0471 mL	
Please refer to the solubility information to select the appropriate solvent.						
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 2.5 mg/mL (5.12 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (5.12 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.5 mg/mL (5.12 mM); Clear solution</li> </ol>					

### BIOLOGICAL ACTIVITY

<b>Description</b>	PARP7-IN-16 (compound 36) is a potent, selective and orally active inhibitor of PARP-1/2/7, with IC <sub>50</sub> s of 0.94, 0.87 and 0.21 nM, respectively. PARP7-IN-16 can be used for the research of breast cancer and prostate cancer <sup>[1]</sup> .		
<b>IC<sub>50</sub> &amp; Target</b>	PARP-1 0.94 nM (IC <sub>50</sub> )	PARP-2 0.87 nM (IC <sub>50</sub> )	PARP-7 0.21 nM (IC <sub>50</sub> )

### REFERENCES

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[1]. Zhou J, et, al. Discovery of Quinazoline-2,4(1 H,3 H)-dione Derivatives Containing a Piperizinone Moiety as Potent PARP-1/2 Inhibitors Design, Synthesis, In Vivo Antitumor Activity, and X-ray Crystal Structure Analysis. J Med Chem. 2023 Oct 26;66(20):14095-14115.

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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