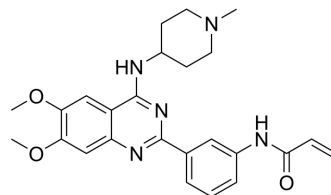


ZZM-1220

Cat. No.:	HY-156285		
Molecular Formula:	C ₂₅ H ₂₉ N ₅ O ₃		
Molecular Weight:	447.53		
Target:	Histone Methyltransferase; Apoptosis		
Pathway:	Epigenetics; Apoptosis		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (223.45 mM; Need ultrasonic)																													
	Preparing Stock Solutions	<table border="1"> <thead> <tr> <th>Solvent</th> <th>Mass</th> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td>Concentration</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1 mM</td> <td></td> <td>2.2345 mL</td> <td>11.1724 mL</td> <td>22.3449 mL</td> </tr> <tr> <td>5 mM</td> <td></td> <td>0.4469 mL</td> <td>2.2345 mL</td> <td>4.4690 mL</td> </tr> <tr> <td>10 mM</td> <td></td> <td>0.2234 mL</td> <td>1.1172 mL</td> <td>2.2345 mL</td> </tr> </tbody> </table>	Solvent	Mass	1 mg	5 mg	10 mg	Concentration					1 mM		2.2345 mL	11.1724 mL	22.3449 mL	5 mM		0.4469 mL	2.2345 mL	4.4690 mL	10 mM		0.2234 mL	1.1172 mL	2.2345 mL			
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Please refer to the solubility information to select the appropriate solvent.																														
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 2.5 mg/mL (5.59 mM); Clear solution; Need ultrasonic																													
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (5.59 mM); Clear solution; Need ultrasonic																													
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: 2.5 mg/mL (5.59 mM); Clear solution; Need ultrasonic																													

BIOLOGICAL ACTIVITY

Description	ZZM-1220 is a histone lysine methyltransferase G9a/GLP covalent inhibitor with IC ₅₀ s of 458 nM and 924 nM, respectively. ZZM-1220 inhibits H3K9me2 in cells and significantly induces apoptosis of triple-negative breast cancer (TNBC) cells and blocks the cell cycle in the G2/M phase ^[1] .	
IC ₅₀ & Target	G9a 458 nM (IC ₅₀)	GLP 924 nM (IC ₅₀)

REFERENCES

[1]. Qiangsheng Zhang, et al. Discovery of novel G9a/GLP covalent inhibitors for the treatment of triple-negative breast cancer. Eur J Med Chem. 2023 Sep 28;261:115841.

Caution: Product has not been fully validated for medical applications. For research use only.

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