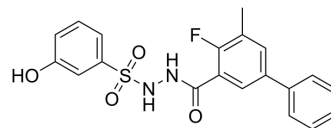


## WM-3835

<b>Cat. No.:</b>	HY-134901
<b>CAS No.:</b>	2229025-70-9
<b>Molecular Formula:</b>	C <sub>20</sub> H <sub>17</sub> FN <sub>2</sub> O <sub>4</sub> S
<b>Molecular Weight:</b>	400.42
<b>Target:</b>	Histone Acetyltransferase; Apoptosis
<b>Pathway:</b>	Epigenetics; Apoptosis
<b>Storage:</b>	4°C, protect from light * In solvent : -80°C, 2 years; -20°C, 1 year (protect from light)



## SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 250 mg/mL (624.34 mM; Need ultrasonic)				
		Solvent Concentration	Mass		
	<b>Preparing Stock Solutions</b>		1 mg	5 mg	10 mg
		1 mM	2.4974 mL	12.4869 mL	24.9738 mL
		5 mM	0.4995 mL	2.4974 mL	4.9948 mL
	10 mM	0.2497 mL	1.2487 mL	2.4974 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: ≥ 2.08 mg/mL (5.19 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (5.19 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.08 mg/mL (5.19 mM); Clear solution</li> </ol>				

## BIOLOGICAL ACTIVITY

<b>Description</b>	WM-3835 is a potent and high-specific HBO1 (KAT7 or MYST2) inhibitor and binds directly to the acetyl-CoA binding site of HBO1 33. WM-3835 activates apoptosis while inhibits osteosarcoma (OS) cell proliferation, migration and invasion. WM-3835 has antitumor activity and potently inhibits pOS-1 xenograft growth in mice <sup>[1]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	HBO1
<b>In Vitro</b>	WM-3835 (1-25 μM; 24-96 hours) inhibits pOS-1 cell viability in a concentration-dependent manner <sup>[1]</sup> . ?WM-3835 (5 μM; 72 h) activates cell apoptosis and significantly increases TUNEL-positive nuclei in pOS-1 cells <sup>[1]</sup> . ?WM-3835 (5 μM; 24 hours) downregulates MYLK-HOXA9 mRNA expression in pOS-1 cells <sup>[1]</sup> .

?WM-3835 (1-25  $\mu$ M) suppresses H4K12ac-H3K14ac in a dose-dependent manner. WM-3835 does not alter the expressions of HBO1 protein and total H3, H4 histones<sup>[1]</sup>.

?WM-3835 (5  $\mu$ M) fails to induce apoptosis and reduction of viability in HBO1-KO pOS-1 cells, koHBO1-1 and koHBO1-2, HBO1-low human osteoblasts<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### Cell Viability Assay<sup>[1]</sup>

Cell Line:	Primary human OS (pOS-1) cells
Concentration:	1, 5, 10, 25 $\mu$ M
Incubation Time:	24, 48, 72, 96 hours
Result:	Inhibited pOS-1 cell viability in a concentration-dependent manner. Exerted a significant anti-survival activity at least 48 h, displaying a time-dependent manner.

#### Apoptosis Analysis<sup>[1]</sup>

Cell Line:	pOS-1 cells
Concentration:	5 $\mu$ M
Incubation Time:	72 hours
Result:	Activated cell apoptosis and significantly increases TUNEL-positive nuclei.

#### RT-PCR<sup>[1]</sup>

Cell Line:	pOS-1 cells
Concentration:	5 $\mu$ M
Incubation Time:	24 hours
Result:	Downregulated MYLK-HOXA9 mRNA expression.

#### In Vivo

WM-3835 (10 mg/kg/day; ip; for 21 days) potently inhibits pOS-1 xenograft growth in SCID mice<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	SCID mice (18-19 g, female) with pOS1 cells <sup>[1]</sup>
Dosage:	10 mg/kg
Administration:	IP; daily; for 21 days
Result:	Potently inhibited pOS-1 xenograft growth.

#### CUSTOMER VALIDATION

- Cell Death Dis. 2023 Aug 4;14(8):498.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

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## REFERENCES

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[1]. Yan-Yang Gao, et al. The histone acetyltransferase HBO1 functions as a novel oncogenic gene in osteosarcoma. *Theranostics*. 2021 Mar 4;11(10):4599-4615.

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

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