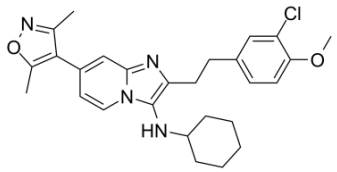
UMB298

Cat. No.:	HY-139148
CAS No.:	2266569-73-5
Molecular Formula:	$C_{27}H_{31}ClN_4O_2$
Molecular Weight:	479.01
Target:	Epigenetic Reader Domain
Pathway:	Epigenetics
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 : 25 mg/mL (52.19 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.0876 mL	10.4382 mL	20.8764 mL
5 mM	0.4175 mL	2.0876 mL	4.1753 mL
10 mM	0.2088 mL	1.0438 mL	2.0876 mL

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 (5.22 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

UMB298 is a potent and selective CBP/P300 bromodomain inhibitor[1].

IC_{50} & Target

BRD4
5193 nM (IC_{50})

In Vitro

UMB298 (0.01~10 μM; 50 days; MOLM13 and MM cells) inhibits cells growth[1].
UMB298 (1~10 μM; 2 hours; MOLM13 cells) reduces the H3K27ac level similar to CBP30 and causes MYC depletion as a signature of CBP inhibition in acute myeloid leukemia[1].
UMB298 (3 μM; 2hours; MOLM13 cells) down-regulates MYC expression[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[1]

Cell Line:	MOLM13 and MM cells
Concentration:	0.01~10 μM
Incubation Time:	50 days
Result:	Inhibited cells growth.

Western Blot Analysis[1]

Cell Line:	MOLM13 cells
Concentration:	1~10 μM
Incubation Time:	2 hours
Result:	Reduced the H3K27ac level similar to CBP30 and caused MYC depletion as a signature of CBP inhibition in acute myeloid leukemia.

RT-PCR[1]

Cell Line:	MOLM13 cells
Concentration:	3 μM
Incubation Time:	2 hours
Result:	Down-regulated MYC expression.

REFERENCES

[1]. Muthengi A, et al. Development of Dimethylisoxazole-Attached Imidazo[1,2-a]pyridines as Potent and Selective CBP/P300 Inhibitors. J Med Chem. 2021;64(9):5787-5801.

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