SGC-SMARCA-BRDVIII

Cat. No.: HY-145446

CAS No.: 1997319-84-2

Molecular Formula: $C_{19}H_{25}N_5O_3$

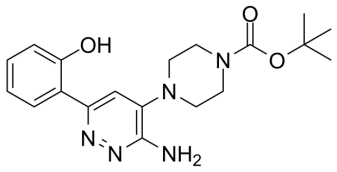
Molecular Weight: 371.43

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 (67.31 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.6923 mL	13.4615 mL	26.9230 mL
	5 mM	0.5385 mL	2.6923 mL	5.3846 mL
	10 mM	0.2692 mL	1.3461 mL	2.6923 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 (6.73 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (6.73 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.73 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

SGC-SMARCA-BRDVIII is a potent and selective inhibitor of SMARCA2/4 and PB1(5), with K_ds of 35 nM, 36 nM, and 13 nM, respectively. SGC-SMARCA-BRDVIII also inhibits PB1(2) and PB1(3), with K_ds of 3.7 and 2.0 μM, respectively. SGC-SMARCA-BRDVIII can block adipogenesis of 3T3-L1 murine fibroblasts[1][2].

IC_{50} & Target

Kd: 35 nM (SMARCA2), 36 nM (SMARCA4), 13 nM (PB1(5))[1]

In Vitro

SGC-SMARCA-BRDVIII (compound 22) (1 μM; 14 days) blocks adipocyte differentiation in 3T3-L1 murine fibroblasts[1].

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

REFERENCES

[1]. Wanior M, et, al. Pan-SMARCA/PB1 Bromodomain Inhibitors and Their Role in Regulating Adipogenesis. J Med Chem. 2020 Dec 10;63(23):14680-14699.

[2]. Mélin L, et, al. Design and Synthesis of LM146, a Potent Inhibitor of PB1 with an Improved Selectivity Profile over SMARCA2. ACS Omega. 2021 Aug 9;6(33):21327-21338.

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