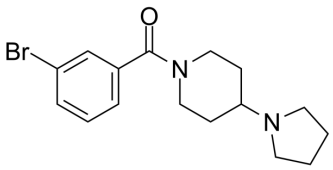
UNC926

Cat. No.:	HY-16510
CAS No.:	1184136-10-4
Molecular Formula:	$C_{16}H_{21}BrN_2O$
Molecular Weight:	337.25
Target:	Epigenetic Reader Domain
Pathway:	Epigenetics
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 41.67 mg/mL (123.56 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.9652 mL	14.8258 mL	29.6516 mL
	5 mM	0.5930 mL	2.9652 mL	5.9303 mL
	10 mM	0.2965 mL	1.4826 mL	2.9652 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 (7.41 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (7.41 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (7.41 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

UNC926 is a methyl-lysine (Kme) reader domain inhibitor that inhibits L3MBTL1 with an IC_{50} of 3.9 μM[1].

IC_{50} & Target

IC50: 3.9 μM (L3MBTL1), 3.2 μM (L3MBTL3), 15.6 μM (L3MBTL4)[1]

In Vitro

UNC926 also exhibits a low micromolar affinity for the close homolog, L3MBTL3 (IC_{50} of 3.2 μM), with a decrease in affinity for the other MBT domains and no binding to CBX7[1].
UNC926 (1-25 μM) inhibits binding of the 3xMBT domain to H4K20me1.UNC926 inhibits the association of L3MBTL13xMBT

with the appropriate histonepeptides in a dose-dependent manner. UNC926 does not have an effect on the binding of 53BP1 to H4K20me1, demonstrating specificity of UNC926 for L3MBTL1 over 53BP1[1].

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

REFERENCES

[1]. Herold JM, et al. Structure–activity relationships of methyl-lysine reader antagonists. MedChemComm. 2012;3(45):45–51.

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