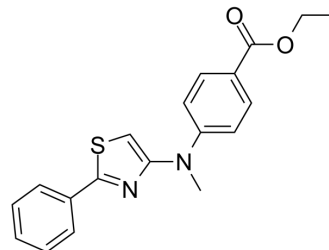


Neuropathiazol

Cat. No.:	HY-10591		
CAS No.:	880090-88-0		
Molecular Formula:	C ₁₉ H ₁₈ N ₂ O ₂ S		
Molecular Weight:	338.42		
Target:	Others		
Pathway:	Others		
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 : 33.33 mg/mL (98.49 mM; Need ultrasonic)					
	Preparing Stock Solutions	<div><div>Solvent</div><div>Concentration</div></div>	Mass	1 mg	5 mg	10 mg
		1 mM		2.9549 mL	14.7745 mL	29.5491 mL
		5 mM		0.5910 mL	2.9549 mL	5.9098 mL
		10 mM		0.2955 mL	1.4775 mL	2.9549 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 (7.39 mM); Clear solution					
	2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (7.39 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	Neuropathiazol, a neuronal differentiation inducer, selectively induces neuronal differentiation of multipotent hippocampal neural progenitor cells ^[1] .
In Vitro	<p>Neuropathiazol (5-15 μM; 5 hours) significantly slows cell proliferation without visible cytotoxic effects^[1].</p> <p>Neuropathiazol (10 μM; 1-4 days) down-regulates Sox2 (a neural progenitor marker) and up-regulates NeuroD1 (a neuronal cell marker)^[1].</p> <p>Neuropathiazol also inhibits astroglial differentiation that is induced by LIF and BMP2^[1].</p> <p>Neuropathiazol induces neuronal differentiation of multipotent adult hippocampal neural progenitor cells^[1].</p> <p>Neuropathiazol can competitively suppress astroglial differentiation by LIF/BMP2/FBS in a dose-dependent manner^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

Cell Proliferation Assay^[1]

Cell Line:	HCN cells
Concentration:	5 μ M, 10 μ M, 15 μ M
Incubation Time:	5 hours
Result:	Inhibited proliferation of HCN neural progenitor cells.

RT-PCR^[1]

Cell Line:	HCN cells
Concentration:	10 μ M
Incubation Time:	1 day, 4 days
Result:	Downregulated Sox2 and upregulated NeuroD1.

REFERENCES

[1]. Warashina M, et al. A synthetic small molecule that induces neuronal differentiation of adult hippocampal neural progenitor cells. *Angew Chem Int Ed Engl.* 2006 Jan 16;45(4):591-3.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA