Product Data Sheet

Omigapil maleate

Cat. No.:HY-16361ACAS No.:200189-97-5Molecular Formula: $C_{23}H_{21}NO_5$ Molecular Weight:391.42

Target: Apoptosis
Pathway: Apoptosis

Storage: 4°C, sealed storage, away from moisture

* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

SOLVENT & SOLUBILITY

In Vitro

DMSO: 50 mg/mL (127.74 mM; ultrasonic and warming and heat to 80°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.5548 mL	12.7740 mL	25.5480 mL
	5 mM	0.5110 mL	2.5548 mL	5.1096 mL
	10 mM	0.2555 mL	1.2774 mL	2.5548 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: \geq 2.5 mg/mL (6.39 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (6.39 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.39 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	Omigapil maleate, an orally bioavailable GAPDH nitrosylation inhibitor, abrogates $A\beta_{1-42}$ -induced tau acetylation, memory impairment, and locomotor dysfunction in mice. Omigapil maleate has the potential for the research of Alzheimer's disease ^[1] . Omigapil maleate (CGP3446B maleate) is a apoptosis inhibitor. Omigapil maleate can be used for the research of congenital muscular dystrophy (CMD) ^[2] . Omigapil (maleate) is a click chemistry reagent, it contains an Alkyne group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAc) with molecules containing Azide groups.
IC ₅₀ & Target	Apoptosis ^[2]
In Vivo	Treatment of mice with Omigapil (0.1 mg/kg) results in improved muscle regeneration and increased force ^[2] .

Animal Model:	12-week-old dyW/ mag mice ^[2]	
Dosage:	0.1 mg/kg	
Administration:	For the first week of drug treatment, administered once daily by intraperitoneal injection. After weaning (3 weeks of age), applied once daily by oral gavage.	
Result:	Reduced the muscle fibre loss.	
	Many of the functional parameters were significantly improved by omigapil.	

REFERENCES

- [1]. Sarina Meinen, et al. Apoptosis inhibitors and mini-agrin have additive benefits in congenital muscular dystrophy mice. EMBO Mol Med. 2011 Aug;3(8):465-79.
- [2]. Tanusree Sen, et al. Nitrosylation of GAPDH augments pathological tau acetylation upon exposure to amyloid-\(\beta\). Sci Signal. 2018 Mar 20;11(522):eaao6765.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

Tel: 609-228-6898

Fax: 609-228-5909

 $\hbox{E-mail: tech@MedChemExpress.com}$

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