Proteins

Product Data Sheet

Arimoclomol maleate

Cat. No.: HY-106443A CAS No.: 289893-26-1 Molecular Formula: $C_{18}H_{24}CIN_3O_7$ Molecular Weight: 429.85

HSP Target:

Pathway: Cell Cycle/DNA Damage; Metabolic Enzyme/Protease

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: 250 mg/mL (581.60 mM; Need ultrasonic) H₂O: 100 mg/mL (232.64 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.3264 mL	11.6320 mL	23.2639 mL
	5 mM	0.4653 mL	2.3264 mL	4.6528 mL
	10 mM	0.2326 mL	1.1632 mL	2.3264 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: PBS Solubility: 100 mg/mL (232.64 mM); Clear solution; Need ultrasonic
- 2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (4.84 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (4.84 mM); Clear solution
- 4. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (4.84 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	Arimoclomol maleate (BRX-220) is a co-inducer of heat shock proteins (HSP) $^{[1]}$. Arimoclomol protects motor neurons by enhancing Hsp expression, thus directly affecting protein aggregation and clearance of misfolded assemblies via the proteasome-ubiquitin system $^{[2]}$.
IC ₅₀ & Target	HSP

In Vivo

Arimoclomol (BRX-220; 20 mg/kg; orally administered for 5 d) has a protective effect against cholecystokinin-octapeptide (CCK)-induced acute pancreatitis^[1].

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

Animal Model:	Male Wistar rats weighing 240 to 270 $\mathrm{g}^{[1]}$	
Dosage:	20 mg/kg	
Administration:	Administered intragastrically, for 5 days	
Result:	Had a protective effect against CCK-induced acute pancreatitis.	

CUSTOMER VALIDATION

- Exp Eye Res. 2019 Nov;188:107792.
- University of Graz. Institute of Pharmaceutical Science. 2021 Nov.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Rakonczay Z Jr, et al. Nontoxic heat shock protein coinducer BRX-220 protects against acute pancreatitis in rats. Free Radic Biol Med. 2002 Jun 15;32(12):1283-92.

[2]. Phukan J. Arimoclomol, a coinducer of heat shock proteins for the potential treatment of amyotrophic lateral sclerosis. IDrugs. 2010 Jul;13(7):482-96.

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