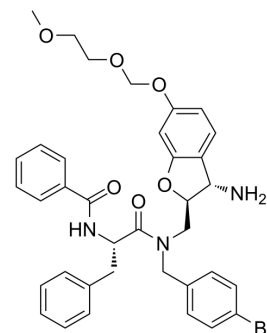


MSN-50

Cat. No.:	HY-118948
CAS No.:	1592908-75-2
Molecular Formula:	C ₃₆ H ₃₈ BrN ₃ O ₆
Molecular Weight:	688.61
Target:	Bcl-2 Family
Pathway:	Apoptosis
Storage:	4°C, stored under nitrogen, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen, away from moisture)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 200 mg/mL (290.44 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		1 mM		1.4522 mL	7.2610 mL	14.5220 mL
	5 mM		0.2904 mL	1.4522 mL	2.9044 mL	
	10 mM		0.1452 mL	0.7261 mL	1.4522 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 5 mg/mL (7.26 mM); Suspended solution; Need ultrasonic 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 5 mg/mL (7.26 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	MSN-50 is a Bax and Bak oligomerization inhibitor. MSN-50 efficiently inhibits liposome permeabilization, prevents genotoxic cell death and promotes neuroprotection ^{[1][2]} .	
IC₅₀ & Target	Bax	Bak
In Vitro	MSN-50 (0~10 uM) inhibits dye release from liposomes in a concentration-dependent fashion. MSN-50 (0~40 uM) inhibits tBid/Bax-mediated MOMP (mitochondrial outer membrane permeabilization) in a concentration-dependent manner and shows concentration-dependent inhibition of Bak-mediated MOMP. MSN-50 inhibits both Bax and Bak after activation by either cBid or Bim. MSN-50 (5 μM; BMK cells) inhibits apoptosis induced by actinomycin D and staurosporin (STS) ^{[1][2]} . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

REFERENCES

- [1]. Niu X, et al. A Small-Molecule Inhibitor of Bax and Bak Oligomerization Prevents Genotoxic Cell Death and Promotes Neuroprotection. Cell Chem Biol. 2017;24(4):493-506.e5.
- [2]. Jensen K, et al. Pharmacological inhibition of Bax-induced cell death: Bax-inhibiting peptides and small compounds inhibiting Bax. Exp Biol Med (Maywood). 2019;244(8):621-629.
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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