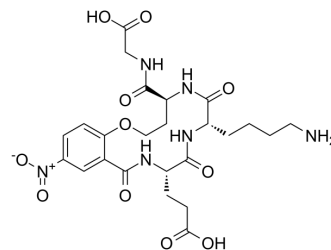


## Tavilermide

Cat. No.:	HY-17622		
CAS No.:	263251-78-1		
Molecular Formula:	C <sub>24</sub> H <sub>32</sub> N <sub>6</sub> O <sub>11</sub>		
Molecular Weight:	580.54		
Target:	Trk Receptor		
Pathway:	Neuronal Signaling; Protein Tyrosine Kinase/RTK		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

#### In Vitro

NH<sub>4</sub>OH : 50 mg/mL (86.13 mM; ultrasonic and adjust pH to 10 with NH<sub>4</sub>OH)  
 H<sub>2</sub>O : 2 mg/mL (3.45 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.7225 mL	8.6127 mL	17.2253 mL
	5 mM	0.3445 mL	1.7225 mL	3.4451 mL
	10 mM	0.1723 mL	0.8613 mL	1.7225 mL

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

#### In Vivo

- Add each solvent one by one: 50% PEG300 >> 50% saline  
 Solubility: 25 mg/mL (43.06 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 0.5% CMC-Na/saline water  
 Solubility: 10 mg/mL (17.23 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: PBS  
 Solubility: 4.17 mg/mL (7.18 mM); Clear solution; Need ultrasonic and warming and heat to 60°C

### BIOLOGICAL ACTIVITY

#### Description

Tavilermide is a selective, partial agonist of TrkA, or a nerve growth factor (NGF) mimetic.

#### IC<sub>50</sub> & Target

TrkA<sup>[1]</sup>

#### In Vitro

Tavilermide (MIM-D3) is a tyrosine kinase TrkA receptor agonist, which can be used to treat dry eye. Tavilermide is a proteolytically stable, cyclic peptidomimetic that has been shown to be a partial TrkA receptor agonist. Tavilermide

---

demonstrates activities similar to NGF (but does not bind to the p75NTR receptor) and can potentiate the effects of suboptimal concentrations of NGF<sup>[1]</sup>.

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

---

## CUSTOMER VALIDATION

- Brain. 2021 Dec 17;awab460.
- Nanoscale. 2019 Mar 21;11(12):5580-5594.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

[1]. Meerovitch K, et al. Safety and efficacy of MIM-D3 ophthalmic solutions in a randomized, placebo-controlled Phase 2 clinical trial in patients with dry eye. Clin Ophthalmol. 2013;7:1275-85.

---

**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](mailto:tech@MedChemExpress.com)

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