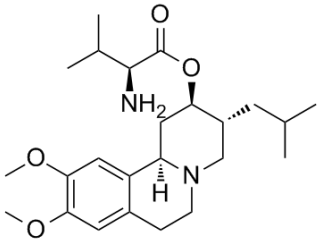
Valbenazine

Cat. No.:	HY-16771
CAS No.:	1025504-45-3
Molecular Formula:	$C_{24}H_{38}N_2O_4$
Molecular Weight:	418.57
Target:	Monoamine Transporter
Pathway:	Membrane Transporter/Ion Channel
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (119.45 mM; Need ultrasonic)
H_2O : < 0.1 mg/mL (insoluble)

Preparing Stock Solutions	Concentration \ Solvent \ Mass	1 mg	5 mg	10 mg
	1 mM	2.3891 mL	11.9454 mL	23.8909 mL
	5 mM	0.4778 mL	2.3891 mL	4.7782 mL
	10 mM	0.2389 mL	1.1945 mL	2.3891 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 (5.97 mM); Clear solution
2. Add each solvent one by one: **10% DMSO >> 90% corn oil**
   Solubility: ≥ 2.5 mg/mL (5.97 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Valbenazine (NBI-98854) is a vesicular monoamine transporter 2 (**VMAT2**) inhibitor with the **K_i** of 110-190 nM[1].

In Vitro

Valbenazine exhibits VMAT2 binding affinity in rat striatum and human platelets with Kis of 110 and 150 nM, respectively[1].

In Vivo

Valbenazine (10 mg/kg; orally) induces ptosis (primarily an adrenergic response) and increases plasma prolactin primarily a dopaminergic response in rats[1].

REFERENCES

[1]. Dimitri E Grigoriadis, et al. Pharmacologic Characterization of Valbenazine (NBI-98854) and Its Metabolites. J Pharmacol Exp Ther. 2017 Jun;361(3):454-461.

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