**Proteins** 

# **Product** Data Sheet

# hMAO-B-IN-4

Cat. No.: HY-152671 CAS No.: 1666119-75-0 Molecular Formula:  $C_{20}H_{16}O_{2}S$ 

Molecular Weight: 320.4

Target: Monoamine Oxidase Pathway: **Neuronal Signaling** 

Powder -20°C Storage: 3 years

4°C 2 years

-80°C In solvent 6 months

> -20°C 1 month

### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 50 mg/mL (156.05 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.1211 mL	15.6055 mL	31.2110 mL
	5 mM	0.6242 mL	3.1211 mL	6.2422 mL
	10 mM	0.3121 mL	1.5605 mL	3.1211 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (7.80 mM); Clear solution

# **BIOLOGICAL ACTIVITY**

Description hMAO-B-IN-4 (compound B10) is a selective, reversible and blood-brain barrier (BBB) penetrable human monoamine oxidase-B (hMAO-B) inhibitor with an IC $_{50}$  value and a K $_{i}$  value of 0.067 and 0.03  $\mu$ M, respectively. hMAO-B-IN-4 inhibits

hMAO-A with an IC<sub>50</sub> value of 33.82 μM. hMAO-B-IN-4 can be used for Alzheimer's disease (AD) and Parkinson's disease (PD)

research[1].

In Vitro hMAO-B-IN-4 (0-40  $\mu$ M) shows high selectivity to hMAO-B than hMAO-A with a SI value of 504.791  $^{[1]}$ .

hMAO-B-IN-4 (0-40  $\mu$ M) inhibits hMAO-A and hMAO-B with IC50 values of 33.821 and 0.067  $\mu$ M, respectively<sup>[1]</sup>.

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

#### **REFERENCES**

[1]. Sudevan ST, et al. Introduc 27;12(1):22404.	tion of benzyloxy pharmaco	phore into aryl/heteroaryl chalco	ne motifs as a new class of monoar	nine oxidase B inhibitors. Sci Rep. :	2022 Dec
	Caution: Product has n	ot been fully validated for m	edical applications. For researc	h use only.	
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