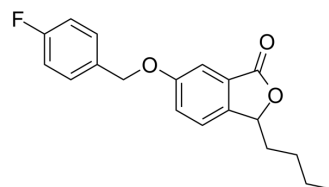


## Monoamine Oxidase B inhibitor 2

Cat. No.:	HY-143245
CAS No.:	2807477-26-3
Molecular Formula:	C <sub>19</sub> H <sub>19</sub> FO <sub>3</sub>
Molecular Weight:	314.35
Target:	Monoamine Oxidase
Pathway:	Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Monoamine Oxidase B inhibitor 2 is a potent, reversible, orally active and selective monoamine oxidase B (MAO-B) inhibitor with an IC <sub>50</sub> of 1.33 nM. Monoamine Oxidase B inhibitor 2 has antioxidant and anti-neuroinflammatory activities. Monoamine Oxidase B inhibitor 2 can cross the blood-brain barrier (BBB), and can be used for Parkinson's disease study <sup>[1]</sup> .	
<b>IC<sub>50</sub> &amp; Target</b>	MAO-B 1.33 nM (IC <sub>50</sub> )	MAO-A 1150 nM (IC <sub>50</sub> )
<b>In Vitro</b>	In cellular experiments, Monoamine Oxidase B inhibitor 2 (compound 8f; 0.5-10.0 μM) could significantly decrease the production of NO and TNF-α in LPS-stimulated BV-2 cells <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
<b>In Vivo</b>	In in vivo acute and subacute MPTP-induced mice model of Parkinson's disease, Monoamine Oxidase B inhibitor 2 (compound 8f; 6.3-39.5 mg/kg; oral administration) could significantly improve most behavioral disorders, restore the dopamine content and decrease the MDA content in the mice striatum <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

### REFERENCES

[1]. Qing Song, et al. 6-Benzyloxyphthalides as selective and reversible monoamine oxidase B inhibitors with antioxidant and anti-neuroinflammatory activities for Parkinson's disease treatment. *Bioorg Chem.* 2022 Mar;120:105623.

**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