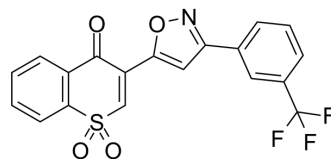


MAO-B-IN-28

Cat. No.:	HY-163031
CAS No.:	3028096-72-9
Molecular Formula:	C ₁₉ H ₁₀ F ₃ NO ₄ S
Molecular Weight:	405.35
Target:	Monoamine Oxidase
Pathway:	Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	MAO-B-IN-28 (compound 10e) is a potent hMAO-B inhibitor with an IC ₅₀ of 1.9±0.5 nM. MAO-B-IN-28 can be used as a candidate for neurodegenerative diseases research ^[1] .								
IC₅₀ & Target	monoamine oxidase B (MAO-B) IC ₅₀ : 1.9±0.5 nM ^[1]								
In Vitro	<p>MAO-B-IN-28 (0.5-128 μM, 24 h) exhibits good cytotoxic effect on MCF-7 cells while having no remarkable cytotoxicity for MGC-803, HCT-116 and HepG2. MAO-B-IN-28 (0.5, 4 μM, 24 h) shows no cytotoxicity in both differentiated SH-SY5Y cells and HVSMC cells^[1].</p> <p>MAO-B-IN-28 (2, 4 μM, 24 h) doesn't cause an increase in ROS levels and doesn't cause oxidative damage to differentiated SH-SY5Y cells^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>MCF-7, MGC-803, HCT-116 and HepG2</td> </tr> <tr> <td>Concentration:</td> <td>0.5, 1, 2, 4, 8, 16, 32, 64, 128 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 h</td> </tr> <tr> <td>Result:</td> <td>Exhibited cytotoxicity IC₅₀s (μM) of 5.816, 21.38, 83.16, 39.64 for MCF-7, HCT-116, HepG2 and MGC-803 cells, respectively.</td> </tr> </table>	Cell Line:	MCF-7, MGC-803, HCT-116 and HepG2	Concentration:	0.5, 1, 2, 4, 8, 16, 32, 64, 128 μM	Incubation Time:	24 h	Result:	Exhibited cytotoxicity IC ₅₀ s (μM) of 5.816, 21.38, 83.16, 39.64 for MCF-7, HCT-116, HepG2 and MGC-803 cells, respectively.
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REFERENCES

[1]. Pengbing Mi, et al. Discovery of C-3 isoxazole substituted thiochromone S,S-dioxide derivatives as potent and selective inhibitors for monoamine oxidase B (MAO-B). European Journal of Medicinal Chemistry. 2024;263:115956.

Caution: Product has not been fully validated for medical applications. For research use only.

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