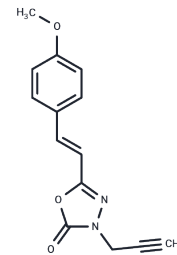


Nrf2-ARE/hMAO-B/QR2 modulator 1

Chemical Properties

CAS No. :	3035124-25-2
Formula:	C14H12N2O3
Molecular Weight:	256.26
Storage:	Keep away from direct sunlight Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	Nrf2-ARE/hMAO-B/QR2 modulator 1, a resveratrol derivative and multi-target-directed ligand (mtdl), activated the NRF2-ARE pathway (CD = 9.83 μ M), selectively inhibited hMAO-B and QR2 (quinone reductase-2, NQO2) (IC 50 = 8.05 and 0.57 μ M), and was able to promote hippocampal neurogenesis and exert neuroprotective and antioxidant effects in an Alzheimer's disease model.
Targets(IC50)	MAO, Reactive Oxygen Species, Nrf2, Monoamine Oxidase, NADPH, ROS
In vitro	After incubating the ARE-blaHepG2 cell line with Nrf2-ARE/hMAO-B/QR2 modulator 1 for 16 hours, CCF4-AM substrate mixture was added, and fluorescence intensity was measured to assess the activity of the Nrf2-ARE pathway. The Results showed that at a concentration of 10 μ M, the expression of Tuj-1 and MAP-2 was highest, and the migration distance of mouse neural stem cells was also the greatest. The study indicates that Nrf2-ARE/hMAO-B/QR2 modulator 1 effectively activates the Nrf2-ARE pathway, inhibits hMAO-B and QR2, and demonstrates significant neuroprotective effects[1].

Solubility Information

Solubility	DMSO: 50 mg/mL (195.11 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2.5 mg/mL (9.76 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.9023 mL	19.5114 mL	39.0229 mL
5 mM	0.7805 mL	3.9023 mL	7.8046 mL
10 mM	0.3902 mL	1.9511 mL	3.9023 mL
50 mM	0.078 mL	0.3902 mL	0.7805 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Wei Z, et al. Cell-Based Assays to Identify Modulators of Nrf2/ARE Pathway. *Methods Mol Biol.* 2022;2474:59-69.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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