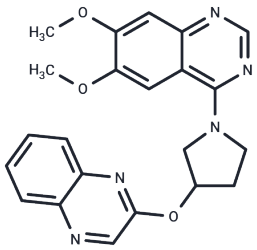
Data Sheet (Cat.No.T24656)

TargetMol

PQ-10

Chemical Properties



CAS No. : 927691-21-2

Formula: C22H21N5O3

Molecular Weight: 403.43

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	PQ-10 (A-844337) is a PDE-10 inhibitor. PQ-10 induces brain glucose metabolism patterns, which may be a potential translational biomarker.
Targets(IC50)	PDE
In vivo	In mice, PQ-10 shows a region-specific increase in 2-DG uptake in the globus pallidus (equivalent to the outer part of the primate pallidus) and lateral habenula [1].

Solubility Information

Solubility	DMSO: 60 mg/mL (148.72 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (4.96 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4787 mL	12.3937 mL	24.7874 mL
5 mM	0.4957 mL	2.4787 mL	4.9575 mL
10 mM	0.2479 mL	1.2394 mL	2.4787 mL
50 mM	0.0496 mL	0.2479 mL	0.4957 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

Attia HN, Maklad YA. Neuroprotective effects of coenzyme Q10 on paraquat-induced Parkinson's disease in experimental animals. Behav Pharmacol. 2018 Feb;29(1):79-86.
Ferguson SA, Meyerhoff ME. Characterization and Quantification of Polyquaterniums via Single-Use Polymer Membrane-Based Polyion-Sensitive Electrodes. ACS Sens. 2017 Feb 24;2(2):268-273.
Ferguson SA, Meyerhoff ME. Manual and Flow-Injection Detection/Quantification of Polyquaterniums via Fully Reversible Polyion-Sensitive Polymeric Membrane-Based Ion-Selective Electrodes. ACS Sens. 2017 Oct 27;2(10): 1505-1511. doi: 10.1021/acssensors.7b00527. Epub 2017 Sep 18. PubMed PMID: 28862444.
Ferguson SA, Meyerhoff ME. Manual and Flow-Injection Detection/Quantification of Polyquaterniums via Fully Reversible Polyion-Sensitive Polymeric Membrane-Based Ion-Selective Electrodes. ACS Sens. 2017 Oct 27;2(10): 1505-1511.