

Decylubiquinone, MPTP inhibitor

Catalog	Unit
TBI2580-10MG	10 mg
TBI2580-50MG	50 mg

Product Details

Formal Name: 2,3-Dimethoxy-5-methyl-6-decyl-1,4-benzoquinone

Molecular Formula: C₁₉H₃₀O₄

Formula Weight: 322.44

CAS Number: 55486-00-5

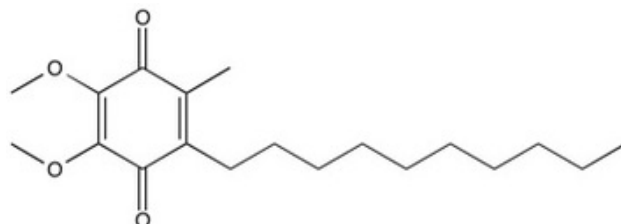
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to 10 mg/ml)

Storage: -20°C

Stability: ≥ 1 year.



Applications

MPTP inhibitor

Functions

Inhibits the Ca²⁺ dependent mitochondrial permeability transition pore (MPTP) without inhibiting respiration. Maximum effect on Ca²⁺ retention capacity of rat liver mitochondria at 100 μM. Inhibits etoposide-induced apoptosis in in L929 cells at 5 μM via inhibition of cytochrome c release. Delays rotenone-induced cardiac dysfunction in a zebrafish model of development and cardiovascular function. Substrate for various quinone oxidoreductases.

Application Procedures

First dissolved in DMSO (up to 10 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 1 month.

For research use only.