

Rotenone, Mitochondrial Complex I Inhibitor

Catalog	Unit
TBI2277-50MG	50 mg
TBI2277-1G	1 g

Product Details

Formal Name: (2R,6aS,12aS)-1,2,12,12a-Tetrahydro-8,9-dimethoxy-2-(1-methylethenyl)-[1]benzopyrano[3,4-b]furo[2,3-h][1]benzopyran-6(6aH)-one

Alternate Names: Nicouline; NSC-26285

Molecular Formula: C₂₃H₂₂O₆

Formula Weight: 394.4

CAS Number: 83-79-4

Purity: >98%

Formulation: Powder

Solubility: Soluble in DMSO (up to 50 mg/ml)

Storage: RT

Stability: ≥ 2 years.

Applications

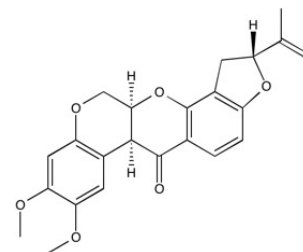
Mitochondrial Complex I Inhibitor

Functions

The most common member of the rotenoid natural product family inhibits complex I of the mitochondrial electron transport chain (IC₅₀ = 1.7 - 2.2 μM). Also inhibits NADH oxidation by cardiac sarcoplasmic reticulum (IC₅₀ = 3.4 nM). May be used to induce Parkinsonism in animal models. Inhibits autophagy by blocking lysosomal degradation of autophagic vacuoles.

Application Procedures

First dissolved in DMSO (50 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.



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