abcam

Product datasheet

Rotenone, mitochondrial electron transport chain inhibitor ab143145

10 References 1 Image

Overview

Product name Rotenone, mitochondrial electron transport chain inhibitor

Description Mitochondrial electron transport chain complex I inhibitor. Potent NADH oxidation inhibitor.

Biological description Mitochondrial electron transport chain complex I inhibitor (IC₅₀ values are 1.7 - 2.2 μM). Potent

NADH oxidation inhibitor ($IC_{50} = 3.4 \text{ nM}$). Suppresses microtubule assembly. Induces BRL cell apoptosis. Shows antiproliferative effects. Shows central effects. Induces parkinsonian behavior

in vivo.

Purity > 97% **CAS Number** 83-79-4

Chemical structure

Properties

Chemical name (2R,6aS,12aS)-1,2,12,12a-Tetrahydro-8,9-dimethoxy-2-(1-methylethenyl)-

Molecular weight 394.42

Molecular formula $C_{23}H_{22}O_6$

PubChem identifier 6758

Storage instructions Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12

months.

Solubility overview Soluble in ethanol to 5 mM and in DMSO to 100 mM

Handling Wherever possible, you should prepare and use solutions on the same day. However, if you need

to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and

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prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour.

Toxic, refer to SDS for further information.

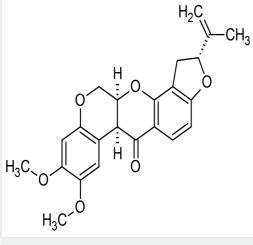
Need more advice on solubility, usage and handling? Please visit our <u>frequently asked</u> <u>questions (FAQ) page</u> for more details.

SMILES CC(=C)

[C@H]1CC2=C(O1)C=CC3=C2O[C@@H]4COC5=CC(=C(C=C5[C@@H]4C3=O)OC)OC

Source Synthetic

Images



Chemical Structure - Rotenone, mitochondrial electron transport chain inhibitor (ab143145)

2D chemical structure image of ab143145, Rotenone, mitochondrial electron transport chain inhibitor

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"

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•	Abcam biochemicals are novel compounds and we have not tested their biological activity in house. Please use the literature to identify how to use these products effectively. If you require further assistance please contact the scientific support team