# Rotenone, mitochondrial electron transport chain inhibitor ab143145

## Overview

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product name</strong></td>
<td>Rotenone, mitochondrial electron transport chain inhibitor</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>Mitochondrial electron transport chain complex I inhibitor. Potent NADH oxidation inhibitor.</td>
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<tr>
<td><strong>Biological description</strong></td>
<td>Mitochondrial electron transport chain complex I inhibitor (IC₅₀ values are 1.7 - 2.2 µM). Potent NADH oxidation inhibitor (IC₅₀ = 3.4 nM). Suppresses microtubule assembly. Induces BRL cell apoptosis. Shows antiproliferative effects. Shows central effects. Induces parkinsonian behavior <em>in vivo.</em></td>
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<tr>
<td><strong>Purity</strong></td>
<td>&gt; 97%</td>
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<tr>
<td><strong>CAS Number</strong></td>
<td>83-79-4</td>
</tr>
</tbody>
</table>

## Properties

- **Chemical 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  
- **Molecular weight**: 394.42  
- **Molecular formula**: C\textsubscript{23}H\textsubscript{22}O\textsubscript{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...
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 frequently asked questions (FAQ) page 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

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

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