Product Name: Oltipraz
Catalog Number: T0153
CAS Number: 64224-21-1
Molecular Formula: C8H6N2S3
Molecular Weight: 226.34
Appearance: Solid
Melting Point: 165-166°C

Description: Oltipraz is a synthetic dithiolethione with potential chemopreventive and anti-angiogenic properties. Oltipraz induces phase II detoxification enzymes, such as glutathione S transferase (GST) and NAD(P)H: quinone oxidoreductase 1 (NQO1). The induction of detoxification enzymes enhances the detoxification of certain cancer-causing agents, thereby enhancing their elimination and preventing carcinogen-induced DNA damages. Although the exact mechanism through which the anti-angiogenesis effect remains to be fully elucidated, oltipraz maybe able to modulate the expression of a number of angiogenic factors, thereby blocking the sustained and focal neovascularization in multiple tumor cell types.

Storage: 2 years -80°C in solvent; 3 years -20°C powder;

Solubility

<table>
<thead>
<tr>
<th>DMSO</th>
<th>11.3 mg/mL (50 mM)</th>
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<td>( &lt; 1 mg/ml refers to the product slightly soluble or insoluble )</td>
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Receptor (IC50)

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<tr>
<th>Reverse Transcriptase</th>
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<tr>
<td>HIF-1α</td>
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In vitro Activity
Oltipraz, as a chemoprotective agent, induces Phase II detoxification enzyme activity in a Nrf2-dependent manner. [1] In human HT29 colon cancer cells, oltipraz inhibits the induction of HIF-1α by insulin, hypoxia or CoCl2 by significantly accelerating degradation of HIF-1α protein. [2]

In vivo Activity
Oltipraz (500 mg/kg, p.o.) significantly reduces multiplicity of gastric neoplasia in wild-type mice by 55%, but has no effect on tumor burden in nrf2-deficient mice. [1] In BALB/c nude mice transplanted with HCT116 cells, Oltipraz (200 mg/kg, p.o.) inhibits tumor growth and angiogenesis via inhibition of HIF-1α. [2] In rats on a CDAA diet, Oltipraz attenuate the progression of nonalcoholic steatohepatitis-related fibrosis. [3]

Animal Experiment
Animal Model: Fewild-type and nrf2-disrupted mice

Reference

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