

Certificate of Analysis

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Product Name: Oltipraz

Catalog No.: 5294

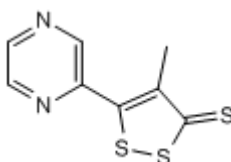
Batch No.: 1

CAS Number: 64224-21-1

IUPAC Name: 4-Methyl-5-(2-pyrazinyl)-3H-1,2-dithiole-3-thione

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₈H₆N₂S₃
Batch Molecular Weight: 226.34
Physical Appearance: Red solid
Solubility: DMSO to 50 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.7% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	42.46	2.67	12.38
Found	42.72	2.62	12.19

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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CAS Number: 64224-21-1

IUPAC Name: 4-Methyl-5-(2-pyrazinyl)-3H-1,2-dithiole-3-thione

Description:

Nrf2 activator; activates Nrf, which binds to antioxidant response elements (AREs) and induces Phase-I and -II drug-metabolizing enzymes including CYP2B and NQO1. Also increases mRNA levels of multiple hepatic xenobiotic transporters. Elevates expression of genes encoding anti-oxidant and multidrug resistance-associated proteins. Displays chemopreventive activity.

Physical and Chemical Properties:

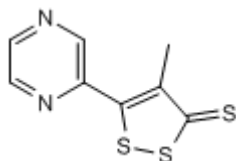
Batch Molecular Formula: C₈H₆N₂S₃

Batch Molecular Weight: 226.34

Physical Appearance: Red solid

Minimum Purity: >99%

Batch Molecular Structure:



References:

Manandhar et al (2007) Induction of Nrf2-regulated genes by 3H-1, 2-dithiole-3-thione through the ERK signaling pathway in murine keratinocytes. *Eur J Pharmacol.* **577** 17. PMID: 17854798.

Maher et al (2007) Oxidative and electrophilic stress induces multidrug resistance-associated protein transporters via the nuclear factor-E2-related factor-2 transcriptional pathway. *Hepatology* **46** 1597. PMID: 17668877.

Merrell et al (2008) Induction of drug metabolism enzymes and transporters by oltipraz in rats. *J.Biochem.Mol.Toxicol.* **22** 128. PMID: 18418891.

Storage: Store at +4°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMSO to 50 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

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