



LKT Laboratories, Inc.

Oltipraz

Phone: 888-558-5227  
651-644-8424  
Fax: 888-558-7329  
Email: [getinfo@lktlabs.com](mailto:getinfo@lktlabs.com)  
Web: [lktlabs.com](http://lktlabs.com)

## Product Information

Product ID O4578

CAS No. 64224-21-1

Chemical Name 4-Methyl-5-pyrazinyl-3H-1,2-dithiole-3-thione

Synonym BRN 0978110

Formula  $C_8H_6N_2S_3$

Formula Wt. 226.34

Melting Point 165-166°C

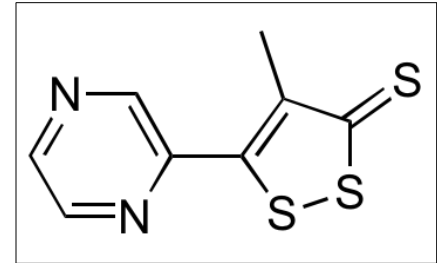
Purity ≥98%

Solubility Soluble in methanol.

Store Temp 4°C

Ship Temp Ambient

**Description** Oltipraz is an activator of Nrf2 that exhibits anti-fibrotic, anti-diabetic, anti-parasitic, anti-angiogenic, and anticancer chemotherapeutic activities. Oltipraz induces phase II enzymes such as NADPH:quinone reductase. Oltipraz also displays efficacy in the treatment of *Schistosoma* infections. In vivo, oltipraz inhibits diet-induced development of hepatic fibrosis. In high-fat diet-fed animal models, oltipraz prevents decreases in expression of GLUT4, Nrf2, superoxide dismutase, and heme oxygenase 1 and suppresses increases in protein oxidation and iNOS production, improving glucose disposal and overall body weight. In animal models of cancer, this compound decreases vessel density, expression of VEGF, and tumor growth; additionally, oltipraz increases ubiquitination and suppresses expression of HIF-1α.



**Bulk quantities available upon request**

Product ID	Size
O4578	50 mg
O4578	250 mg
O4578	500 mg
O4578	1 g

**References** Shimozono R, Asaoka Y, Yoshizawa Y, et al. Nrf2 activators attenuate the progression of nonalcoholic steatohepatitis-related fibrosis in a dietary rat model. *Mol Pharmacol.* 2013 Jul;84(1):62-70. PMID: 23592516.

Yu Z, Shao W, Chiang Y, et al. Oltipraz upregulates the nuclear factor (erythroid-derived 2)-like 2 [corrected](NRF2) antioxidant system and prevents insulin resistance and obesity induced by a high-fat diet in C57BL/6J mice. *Diabetologia.* 2011 Apr;54(4):922-34. Erratum in: *Diabetologia.* 2011 Apr;54(4):989. PMID: 21161163.

Lee WH, Kim YW, Choi JH, et al. Oltipraz and dithiolethione congeners inhibit hypoxia-inducible factor-1α activity through p70 ribosomal S6 kinase-1 inhibition and H<sub>2</sub>O<sub>2</sub>-scavenging effect. *Mol Cancer Ther.* 2009 Oct;8(10):2791-802. PMID: 19789218.

Morsy GH. Parasitological and histo-pathological studies on schistosomiasis mansoni infected mice and treated with praziquatel and/or oltipraz. *J Egypt Soc Parasitol.* 2009 Aug;39(2):687-701. PMID: 19795775.

Merrell MD, Jackson JP, Augustine LM, et al. The Nrf2 activator oltipraz also activates the constitutive androstane receptor. *Drug Metab Dispos.* 2008 Aug;36(8):1716-21. PMID: 18474683.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.