



LKT Laboratories, Inc.

## Risperidone

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 R3475

CAS No. 106266-06-2

Chemical Name 3-[2-[4-(6-fluoro-1,2-benzoxazol-3-yl)piperidin-1-yl]ethyl]-2-methyl-6,7,8,9-tetrahydropyrido[2,1-b]pyrimidin-4-one

Synonym

Formula  $C_{23}H_{27}FN_4O_2$

Formula Wt. 410.49

Melting Point 170C

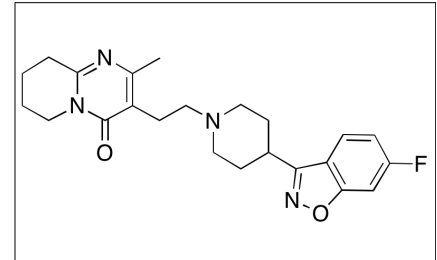
Purity  $\geq 98\%$

Solubility

Store Temp Ambient

Ship Temp Ambient

**Description** Risperidone is a benzisoxazole atypical antipsychotic that also exhibits antidepressant, anti-inflammatory, and neuroprotective activities. Risperidone acts as an antagonist at D2 receptors and 5-HT<sub>2A</sub> receptors and as an agonist at 5-HT<sub>7</sub> receptors. In vivo, risperidone increases release of DA, 5-HT, and NE in the frontal cortex. Risperidone is also a partial uncompetitive inhibitor of D-amino acid oxidase, which inhibits oxidation of D-serine, an NMDA receptor agonist associated with the onset of schizophrenia; risperidone also inhibits D-amino acid-induced cell death in vitro. In animal models of neuroinflammation or encephalitis, risperidone increases expression of PPAR $\gamma$  and decreases LPS-induced expression of TNF- $\alpha$ , IL-1 $\beta$ , COX, p38 MAPK, and NF- $\kappa$ B.



### Pricing and Availability

*Bulk quantities available upon request*

Product ID	Size	List Price
R3475	100 mg	\$103.40
R3475	250 mg	\$196.40
R3475	1 g	\$578.90

**References** Kamińska K, Gołmbiowska K, RogóZ Z. Effect of risperidone on the fluoxetine-induced changes in extracellular dopamine, serotonin and noradrenaline in the rat frontal cortex. *Pharmacol Rep.* 2013;65(5):1144-51. PMID: 24399710.

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Kozielska M, Johnson M, Pilla Reddy V, et al. Pharmacokinetic-pharmacodynamic modeling of the D2 and 5-HT (2A) receptor occupancy of risperidone and paliperidone in rats. *Pharm Res.* 2012 Jul;29(7):1932-48. PMID: 22437487.

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Toohy N, Klein MT, Knight J, et al. Human 5-HT<sub>7</sub> receptor-induced inactivation of forskolin-stimulated adenylate cyclase by risperidone, 9-OH-risperidone and other "inactivating antagonists". *Mol Pharmacol.* 2009 Sep;76(3):552-9. PMID: 19509219.

Potkin SG, Saha AR, Kujawa MJ, et al. Aripiprazole, an antipsychotic with a novel mechanism of action, and risperidone vs placebo in patients with schizophrenia and schizoaffective disorder. *Arch Gen Psychiatry.* 2003

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