

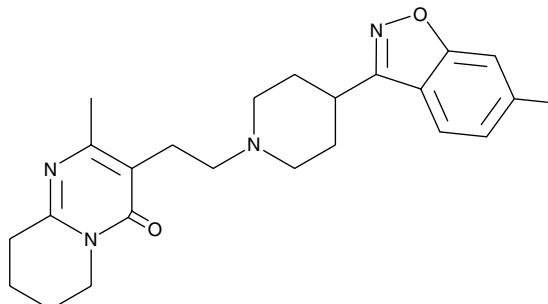
# Product Information



## Risperidone

Item No. 13629

**CAS Registry No.:** 106266-06-2  
**Formal Name:** 3-[2-[4-(6-fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]ethyl]-6,7,8,9-tetrahydro-2-methyl-4H-pyrido[1,2-a]pyrimidin-4-one  
**Synonyms:** Apexidone, Psychodal, R 64766, Spiron  
**MF:**  $C_{23}H_{27}FN_4O_2$   
**FW:** 410.5  
**Purity:**  $\geq 95\%$   
**Stability:**  $\geq 2$  years at  $-20^\circ\text{C}$   
**Supplied as:** A crystalline solid  
**UV/Vis.:**  $\lambda_{\text{max}}$ : 237, 279 nm



### Laboratory Procedures

For long term storage, we suggest that risperidone be stored as supplied at  $-20^\circ\text{C}$ . It should be stable for at least two years. Risperidone is supplied as a crystalline solid. A stock solution may be made by dissolving the risperidone in the solvent of choice. Risperidone is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of risperidone in these solvents is approximately 0.3, 2, and 0.1 mg/ml, respectively.

Risperidone is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, risperidone should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Risperidone has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Risperidone is a longer-acting benzisoxazole derivative used for treating schizophrenia, and also the psychotic, affective, or behavioral symptoms associated with other disorders.<sup>1,2</sup> This second-generation antipsychotic was designed to antagonize both  $D_2$  and  $5\text{-HT}_{2A}$  receptors.<sup>3,4</sup> It has little effect on cholinergic and  $\beta$ -adrenergic receptors but does affect  $\alpha_2$ -adrenergic and histamine  $H_1$  receptors.<sup>3,4</sup> In drug discrimination studies, risperidone antagonized LSD in a complete manner, and without displaying any LSD-like agonist activity.<sup>1</sup>

### References

- Colpaert, F.C. Discovering risperidone: The LSD model of psychopathology. *Nat. Rev. Drug Discov.* **2**, 315-320 (2003).
- Rainer, M.K. Risperidone long-acting injection: A review of its long term safety and efficacy. *Neuropsychiatr. Dis. Treat.* **4**(5), 919-927 (2008).
- Edwards, J.G. Risperidone for schizophrenia. *BMJ* **308**(6940), 1311-1312 (1994).
- Bymaster, F.P., Calligaro, D.O., Falcone, J.F., *et al.* Radioreceptor binding profile of the atypical antipsychotic olanzapine. *Neuropsychopharmacology* **14**(2), 87-96 (1996).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/13629](http://www.caymanchem.com/catalog/13629)

**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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