

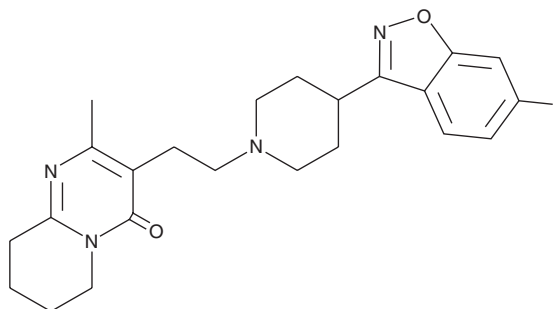
PRODUCT INFORMATION



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
MF: C₂₃H₂₇FN₄O₂
FW: 410.5
Purity: ≥95%
UV/Vis.: λ_{max}: 237, 279 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Risperidone is supplied as a crystalline solid. A stock solution may be made by dissolving the risperidone in the solvent of choice, which should be purged with an inert gas. Risperidone is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). 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.

Description

Risperidone is an atypical antipsychotic that binds to dopamine D₂ receptors (K_i = 3 nM) and the serotonin (5-HT) receptor subtype 5-HT_{2A} (K_i = 0.12 nM).^{1,2} It also binds to dopamine D₄, α₁- and α₂-adrenergic, 5-HT_{1C}, 5-HT_{1D}, and histamine H₁ receptors (K_is = 7, 0.81, 7.3, 47, 52, and 2.1 nM, respectively). Risperidone (0.1 mg/kg per day, i.p.) attenuates deficits in prepulse inhibition of the acoustic startle response, but not deficits in social interaction, in a rat neonatal ventral hippocampal lesion model of schizophrenia.³ Formulations containing risperidone have been used in the treatment of schizophrenia and bipolar disorder.

References

1. Leysen, J.E., Janssen, P.M., Gommeren, W., *et al.* *In vitro* and *in vivo* receptor binding and effects on monoamine turnover in rat brain regions of the novel antipsychotics risperidone and ocaperidone. *Mol. Pharmacol.* **41**(3), 494-508 (1992).
2. 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).
3. Rueter, L.E., Ballard, M.E., Gallagher, K.B., *et al.* Chronic low dose risperidone and clozapine alleviate positive but not negative symptoms in the rat neonatal ventral hippocampal lesion model of schizophrenia. *Psychopharmacology (Berl)*. **176**(3-4), 312-319 (2004).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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