
Product Data Sheet

Product Name: Risperidone hydrochloride

Cat. No.: GC37539

Chemical Properties

Cas. No. 666179-74-4

SMILES O=C1C(CCN2CCC(C3=NOC4=C3C=CC(F)=C4)CC2)=C(C)N=C5N1CCCC5.ClFormula $C_{23}H_{28}ClFN_4O_2$ M.Wt 446.95

Solubility Soluble in DMSO Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure **Protocol****Animal experiment:**

Rats[2]A 1.0 mg/kg dose and a higher dose (3.0 mg/kg) of Risperidone are chosen for study. Beginning on postnatal day 14, subcutaneous injections of Risperidone are performed daily until postnatal day 42. Within each study, three groups of roughly equal numbers of rats receive injections of 1.0 mg/kg of Risperidone, 3.0 mg/kg of Risperidone, or the vehicle used for the Risperidone solution as a control. Within each litter, there are 1-2 pups of the same sex that receive the same treatment. Injections of Risperidone are performed in a room just outside of the housing room. Prior to weaning, the pups are removed from the home cage and placed in a separate cage during injections[2].

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

References:

[1]. Chen ML, et al.

Risperidone modulates the cytokine and chemokine release of dendritic cells and induces TNF- α -directed cellapoptosis in neutrophils. Int Immunopharmacol. 2012

Jan;12(1):197-204.

[2]. Bardgett ME, et

al. Adult rats treated with risperidone during development are hyperactive. Exp Clin Psychopharmacol. 2013

Jun;21(3):259-67.

Background

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, α_1 - and α_2 -adrenergic, 5-HT_{1C}, 5-HT_{1D}, and histamine H₁ receptors (K_i s = 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

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

schizophrenia.³ Formulations containing risperidone have been used in the treatment of schizophrenia and bipolar disorder.

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 ocapiperidone. *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)

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA