

## Product Data Sheet

Product Name: Risperidone mesylate

Cat. No.: GC37540

### Chemical Properties

Cas. No. 666179-96-0

SMILES CS(=O)(O)=O.FC1=CC(ON=C2C3CCN(CCC(C(N(CCCC4)C4=N5)=O)=C5C)CC3)=C2C=C1

Formula  $C_{24}H_{31}FN_4O_5S$  M.Wt 506.59

Solubility Soluble in DMSO Storage Store at  $-20^{\circ}C$

General tips For obtaining a higher solubility, please warm the tube at  $37^{\circ}C$  and shake it in the ultrasonic bath for a while. Stock solution can be stored below  $-20^{\circ}C$  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

### Background

Risperidone is an atypical antipsychotic that binds to dopamine  $D_2$  receptors ( $K_i = 3$  nM) and the serotonin (5-HT) receptor subtype  $5-HT_{2A}$  ( $K_i = 0.12$  nM).<sup>1,2</sup> It also binds to dopamine  $D_4$ ,  $\alpha_1$ - and  $\alpha_2$ -adrenergic,  $5-HT_{1C}$ ,  $5-HT_{1D}$ , and histamine  $H_1$  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 schizophrenia.<sup>3</sup> 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

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

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schizophreniaPsychopharmacology (Berl.)176(3-4)312-319(2004)

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