Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Risperidone (mesylate)

Catalog No: tcsc1928

Available Sizes

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
666179-96-0

Formula:
$C_{24}H_{31}FN_4O_5S$

Pathway:
GPCR/G Protein;Neuronal Signaling;Neuronal Signaling;GPCR/G Protein

Target:
Dopamine Receptor;Dopamine Receptor;5-HT Receptor;5-HT Receptor

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Alternative Names:
R 64 766 mesylate

Observed Molecular Weight:
506.59

Product Description

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Risperidone mesylate(R 64 766 mesylate) is a serotonin 5-HT2 receptor blocker(Ki= 0.16 nM) and a potent dopamine D2 receptor antagonist(Ki= 1.4 nM).

IC50 Value: 0.16 nM (Ki for 5-HT2 receptor); 1.4 nM (Ki for dopamine D2 receptor) [1]

Target: 5-HT2 receptor; D2 receptor

Risperidone is an atypical antipsychotic drug which is mainly used to treat schizophrenia (including adolescent schizophrenia) and schizoaffective disorder. Risperidone has excellent oral activity, a rapid onset, and a 24-h duration of action.

in vitro: Risperidone is serotonin 5-HT2 receptor blockade as shown by displacement of radioligand binding (Ki: 0.16 nM), activity on isolated tissues (EC50: 0.5 nM). Risperidone is also a potent dopamine D2 receptor antagonist as indicated by displacement of radioligand binding (Ki: 1.4 nM), activity in isolated striatal slices (IC50: 0.89 nM) [1]. Risperidone increased the production of IL-10 and MDC as well as the proinflammatory cytokines, such as IL-6, IL-8, and TNF-α, but decreased the production of IP-10 and IL-12. Furthermore, the exposure of DCs to risperidone led to lower IFN-γ production by T-cells [2].

in vivo: Risperidone has the antagonism of peripherally (ED50: 0.0011 mg/kg) and centrally (ED50: 0.014 mg/kg) acting 5-HT2 receptor agonists in rats and antagonism of peripherally (ED50: 0.0057 mg/kg in dogs) and centrally acting D2 receptor agonists (ED50: 0.056-0.15 mg/kg in rats) [1]. Long-Evans rats received daily subcutaneous injections of vehicle or 1 of 2 doses of risperidone (1.0 and 3.0 mg/kg per day) from postnatal Days 14 to 42. Weight gain during development was slightly yet significantly reduced in risperidone-treatedrats. In the first 2 experiments, early-life risperidone administration was associated with increased locomotor activity at 1 week postadministration through approximately 9 months of age, independent of changes in weight gain [3].

Toxicity: The changes in the reproductive system (uterus, ovary, vagina, cervix, and mammary gland) were considered secondary to the prolactin elevation, and the congestion of spleen was related to risperidone [4].