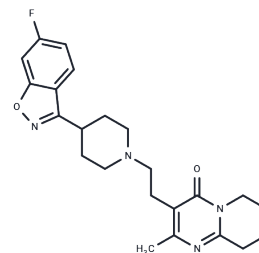


## Risperidone

## Chemical Properties

CAS No. :	106266-06-2
Formula:	C <sub>23</sub> H <sub>27</sub> N <sub>4</sub> O <sub>2</sub>
Molecular Weight:	410.48
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



## Biological Description

Description	Risperidone (R 64 766) is a selective blocker of dopamine D2 receptors and serotonin 5-HT <sub>2</sub> receptors that act as an atypical antipsychotic agent.
Targets(IC50)	5-HT Receptor, Adrenergic Receptor, Dopamine Receptor, P-gp
In vitro	In rats, Risperidone (0.5 mg/kg) results in diminished weight gain and enhanced UCP1 gene expression in BAT, along with elevated serum prolactin levels. At a dose of (0.05 mg/kg), Risperidone increases food intake and leptin gene expression in white adipose tissue without affecting the rate of weight gain.
In vivo	In activated microglia, Risperidone significantly inhibits the production of NO and pro-inflammatory cytokines. In Caco-2 cells, Risperidone (1-50 mM) notably enhances the intracellular accumulation of Rh123 by inhibiting the activity of P-gp, with an IC <sub>50</sub> value of 5.87 mM.

## Solubility Information

Solubility	DMSO: 4.11 mg/mL (10.01 mM), Sonication is recommended. Ethanol: 4.11 mg/mL (10.01 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (2.44 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4362 mL	12.1809 mL	24.3617 mL
5 mM	0.4872 mL	2.4362 mL	4.8723 mL
10 mM	0.2436 mL	1.2181 mL	2.4362 mL
50 mM	0.0487 mL	0.2436 mL	0.4872 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

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