

## Ro 41-1049 hydrochloride

## Chemical Properties

CAS No. :	127917-66-2
Formula:	C12H13ClFN3OS
Molecular Weight:	301.77
Storage:	Keep away from moisture Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>

## Biological Description

Description	Ro 41-1049 hydrochloride is a potent, selective, and reversible inhibitor of monoamine oxidase-A (MAO-A). Ro 41-1049 hydrochloride binds MAO-A with high affinity and is frequently used in neuropharmacology research to investigate MAO-A-mediated neurotransmitter metabolism and related behavioral effects.
Targets(IC50)	MAO, Monoamine Oxidase
In vivo	Ro 41-1049 hydrochloride (1-50 mg/kg; intraperitoneal injection; for 3 hours; Sprague-Dawley rats) treatment inhibits dopamine metabolite formation and increases dopamine levels in a dose-dependent fashion. Pretreatment with Ro 41-1049 hydrochloride (20 mg/kg) significantly increases dopamine formation following L-dopa administration (100 mg/kg IP) while decreasing formation of 3,4-dihydroxyphenylacetic acid (DOPAC) and homovanillic acid (HVA)[2].

## Solubility Information

Solubility	DMSO: 25.6 mg/mL (84.83 mM), Sonication is recommended. H2O: 20 mg/mL (66.28 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: 2 mg/mL (6.63 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	3.3138 mL	16.5689 mL	33.1378 mL
5 mM	0.6628 mL	3.3138 mL	6.6276 mL
10 mM	0.3314 mL	1.6569 mL	3.3138 mL
50 mM	0.0663 mL	0.3314 mL	0.6628 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

Cesura AM, et al. Characterization of the binding of [3H]Ro 41-1049 to the active site of human monoamine oxidase-A. *Mol Pharmacol.* 1990 Mar;37(3):358-66.

Brannan T, et al. Effect of a selective MAO-A inhibitor (Ro 41-1049) on striatal L-dopa and dopamine metabolism: an in vivo study. *J Neural Transm Park Dis Dement Sect.* 1994;8(1-2):99-105.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481