

# Reserpine (hydrochloride)

Catalog No: tcsc1914



## Available Sizes

**Size:** 100mg



## Specifications

**CAS No:**

16994-56-2

**Formula:**

$C_{33}H_{41}ClN_2O_9$

**Pathway:**

Membrane Transporter/Ion Channel

**Target:**

Monoamine Transporter

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 12.66$  mg/mL (19.62 mM); H<sub>2</sub>O :

**Observed Molecular Weight:**

645.14

## Product Description

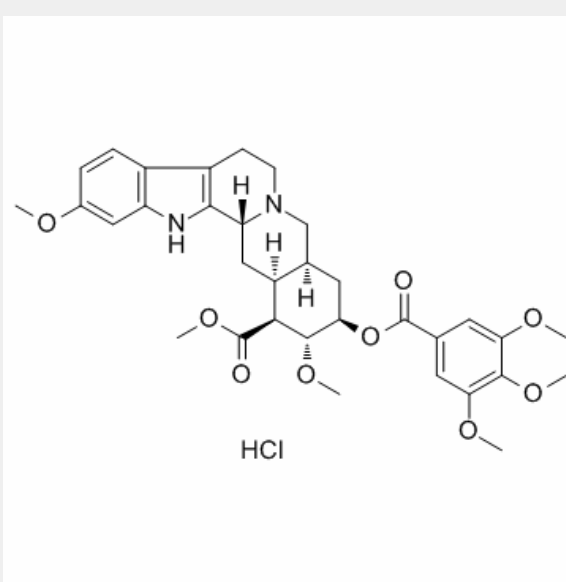
Reserpine hydrochloride is an inhibitor of the **vesicular monoamine transporter 2 (VMAT2)**.

IC<sub>50</sub> & Target: VMAT2<sup>[1]</sup>

**In Vitro:** Reserpine hydrochloride is an inhibitor of the vesicular monoamine transporter 2 (VMAT2). Reserpine hydrochloride displays a significant on the density of dopamine D1 receptors ( $F_{2,12}=8.81$ , p[1]. IC<sub>50</sub> values of 43.9 and 54.9  $\mu$ M are obtained after 1 day of treatment with Reserpine hydrochloride in JB6 P+ and HepG2-C8 cells, respectively. Reserpine hydrochloride induces luciferase activity in a dose-dependent manner at concentrations ranging from 5 to 50  $\mu$ M, and no significant induction is observed

at concentrations lower than 5  $\mu\text{M}$ . Results demonstrate that Reserpine hydrochloride (2.5 to 10  $\mu\text{M}$ ) also increases the protein expression of Nrf2, HO-1, and NQO1. Reserpine hydrochloride at concentrations of 2.5 to 10  $\mu\text{M}$  decreases the mRNA expression of DNMT1, DNMT3a, and DNMT3b in a concentration-dependent manner in JB6 P+ cells after 7 days of treatment. Reserpine hydrochloride at 10  $\mu\text{M}$  generates a significant difference for DNMT3a expression (p[2].

***In Vivo:*** Withdrawal (48 h) from chronic (14-day) but not acute Reserpine hydrochloride administration in a dose of 0.2 mg/kg i.p. produces a significant reduction of the immobility time ( $F_{2,18}=3.68$ ,  $p_{2,18}=4.48$ ,  $p_{2,18}=1.78$ ; NS) in the forced swim test (FST) in rats<sup>[1]</sup>. Reserpine hydrochloride at a dose of 5 mg/kg body weight produces significant increase in the urinary excretion profile of vanillylmandelic acid (VMA) compare to control animals. The amount of 5-hydroxyindoleacetic acid (5-HIAA) excreted in animals treated with Reserpine is found to be more than in the control. Dose dependent hypotension is observed with Reserpine hydrochloride. Reserpine hydrochloride at doses of 0.5, 1, 5, 10 and 15  $\mu\text{g/kg}$  produce significant (p[3].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!