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

Reserpine

Catalog No: tcsc1913

Available Sizes

Size: 100mg

Specifications

CAS No:
50-55-5

Formula:
$C_{33}H_{40}N_2O_9$

Pathway:
Membrane Transporter/Ion Channel

Target:
Monoamine Transporter

Purity / Grade:
>98%

Solubility:
DMSO : 7 mg/mL (11.50 mM; Need ultrasonic)

Observed Molecular Weight:
608.68

Product Description

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

IC50 & Target: VMAT2[1]

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

demonstrate that Reserpine (2.5 to 10 μM) also increases the protein expression of Nrf2, HO-1, and NQO1. Reserpine at concentrations of 2.5 to 10 μM decreases the mRNA expression of DNMT1, DNMT3a, and DNMT3b in a concentration-dependent manner in JB6 P+ cells after 7 days of treatment. Reserpine at 10 μM generates a significant difference for DNMT3a expression (p[2].

In Vivo: Withdrawal (48 h) from chronic (14-day) but not acute Reserpine administration in a dose of 0.2 mg/kg i.p. produces a significant reduction of the immobility time ($F_{2,18}$=3.68, p2,18=4.48, p2,18=1.78; NS) in the forced swim test (FST) in rats[1]. Reserpine 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. Reserpine at doses of 0.5, 1, 5, 10 and 15 μg/kg produce significant (p[3].