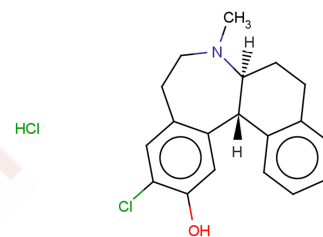


Ecopipam hydrochloride

Chemical Properties

CAS No. :	190133-94-9
Formula:	C ₁₉ H ₂₁ Cl ₂ NO
Molecular Weight:	350.28
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	Ecopipam (SCH 39166) hydrochloride is a highly potent, selective, and orally active antagonist of dopamine D1/D5 receptors. It exhibits impressive binding affinities, with K_i values of 1.2 nM and 2.0 nM for D1 and D5 receptors, respectively. Ecopipam hydrochloride demonstrates remarkable selectivity, displaying over 40-fold selectivity compared to D2, D4, 5-HT, and α_2a receptors, with K_i values of 0.98 μ M, 5.52 μ M, 0.08 μ M, and 0.73 μ M, respectively. Its application extends to various areas of research, including schizophrenia, cocaine addiction, and obesity [1] [3].
Targets(IC50)	5-HT Receptor, Adrenergic Receptor, Dopamine Receptor
In vitro	Ecopipam hydrochloride (2 μ M) entirely eliminates the proconvulsive impact of Dopamine (10 μ M) in isolated corticohippocampal formations [2].
In vivo	Ecopipam hydrochloride, administered in varying dosages and methods, demonstrates potent effects in modulating behavior and neurotransmitter release in rat models. At doses ranging from 0.003 to 0.3 mg/kg, a single subcutaneous (s.c.) injection of Ecopipam significantly inhibits the Nicotine-induced enhancement of sensory reinforcement in adult rats [3]. When administered orally at 10 mg/kg, Ecopipam counteracts the stereotypical behaviors induced by Apomorphine [4]. Furthermore, through perfusion at concentrations of 5 and 10 μ M (1 μ L/min), Ecopipam effectively and reversibly diminishes the release of acetylcholine in the rat striatum in a dose-dependent manner [5]. In experiments involving young adult Long-Evans rats injected with Nicotine, doses of Ecopipam were methodologically varied (0.003, 0.01, 0.03, 0.1, 0.3 mg/kg), administered subcutaneously 20 minutes before nicotine exposure (0.1 mg/kg), revealing a dose-dependent reduction in lever pressing, indicative of both active and inactive lever interactions.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8549 mL	14.2743 mL	28.5486 mL
5 mM	0.571 mL	2.8549 mL	5.7097 mL
10 mM	0.2855 mL	1.4274 mL	2.8549 mL
50 mM	0.0571 mL	0.2855 mL	0.571 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.

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