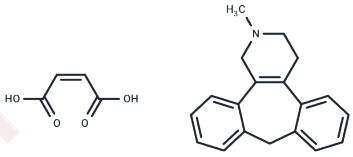
Data Sheet (Cat.No.T12900L)

TargetMol

Setiptiline maleate

Chemical Properties



CAS No. : 85650-57-3

Formula: C23H23NO4

Molecular Weight: 377.43

Storage: Keep away from moisture
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	Setiptiline maleate is the salt form of Setiptiline.Setiptiline (Org-8282) is a norepinephrine reuptake inhibitor, 2-adrenergic receptor antagonist, H1 receptor inverse agonist, and 5-HT serotonin receptor antagonist with antidepressant activity.
Targets(IC50)	5-HT Receptor,Adrenergic Receptor,Norepinephrine,Histamine Receptor
In vitro	Setiptiline maleate weakly inhibits norepinephrine reuptake in rat brain synaptosomes, thereby enhancing noradrenergic neurotransmission.[1] In rat brain membrane preparations, Setiptiline maleate blocks presynaptic α2-adrenergic receptors, which facilitates the increased release of norepinephrine and serotonin.[2] In HEK293 cells expressing human 5-HT2A receptors, setiptiline inhibited serotonin-induced calcium influx in a dose-dependent manner.[3]
In vivo	Setiptiline maleate mildly increased spontaneous motor activity and ambulation in rats (open field test), and enhanced the locomotor stimulation induced by methamphetamine. Setiptiline maleate significantly reduced immobility time in the forced swim test in rats, indicating antidepressant-like properties. Setiptiline maleate inhibited haloperidol-induced catalepsy, physostigmine-induced yawning, 5-HTP + Ro4-4602-induced body shaking and head twitch, and morphine withdrawal-induced body shaking. [4]

Solubility Information

Solubility	DMSO: 80 mg/mL (211.96 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: 3.3 mg/mL (8.74 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6495 mL	13.2475 mL	26.495 mL
5 mM	0.5299 mL	2.6495 mL	5.299 mL
10 mM	0.2649 mL	1.3247 mL	2.6495 mL
50 mM	0.053 mL	0.2649 mL	0.5299 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

Koide, T., & Uyemura, K. (2002). Inhibition of (3H)-dopamine uptake into rat brain synaptosomes by the new non-tricyclic antidepressants, FS32 and FS97. European Journal of Pharmacology, 62(2-3), 147-155.

ODAGAKI, Y., & TOYOSHIMA, R. (2008). Pharmacological characterization of α2D-adrenergic receptor-mediated [35S]GTPγS binding in rat cerebral cortical membranes. Pharmacological Research, 57(6), 435-444.

John Jayakumar JAK, Panicker MM, Basu B. Serotonin 2A (5-HT2A) receptor affects cell-matrix adhesion and the formation and maintenance of stress fibers in HEK293 cells. Sci Rep. 2020 Dec 10;10(1):21675.
Yamada K, Furukawa T. [Behavioral effects of a new antidepressant, setiptiline]. Nihon Yakurigaku Zasshi. 1991 Jan;97(1):31-9. Japanese.
Kuniyoshi M, et al. Effectiveness of concomitant setiptiline maleate (Tecipul) on negative symptoms of schizophrenia. Prog Neuropsychopharmacol Biol Psychiatry. 1994 Mar;18(2):339-46.