Data Sheet (Cat.No.T4655)

TargetMol
A DRUG SCREENING EXPERT

Pipequaline

Chemical Properties

CAS No.:	77472-98-1
Formula:	C22H24N2
Molecular Weight:	316.44
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Pipequaline is an anticonflict & anticonvulsant quinoline derivative. It is an anxiolytic drug that was never marketed. It possesses a novel chemical structure that is not closely related to other drugs of this type. The drug has a similar pharmacological profile to the benzodiazepine family of drugs, but with mainly anxiolytic properties and very little sedative, amnestic or anticonvulsant effects, and so is classified as a nonbenzodiazepine anxiolytic.
Targets(IC_{50})	GABAA: None
In vitro	Pipequaline is extensively bound to plasma proteins: i.e. human serum albumin (HSA), alpha-1-acid glycoprotein (AAG), lipoproteins and blood cells, mainly erythrocytes[1].
In vivo	Intravenously administered pipequaline exerts a partial suppression of activations by kainate, glutamate and acetylcholine. Microiontophoretic applications of pipequaline reduces the neuronal activation by kainate[2]. Pipequaline produces dose-related decreases in motor activity. Pipequaline produces significant dose-related decreases in the number of head-dips made[3].

Solubility Information

Solubility	DMSO: 32 mg/mL (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.16 mL	15.801 mL	31.602 mL
5 mM	0.632 mL	3.16 mL	6.32 mL
10 mM	0.316 mL	1.58 mL	3.16 mL
50 mM	0.063 mL	0.316 mL	0.632 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Essassi D, et al. Pipequaline transport from blood to brain and liver: role of plasma protein-bound drug. J Pharm Pharmacol. 1989 Sep;41(9):595-600.

2. Debonnel G, et al. Pipequaline acts as a partial agonist of benzodiazepine receptors: an electrophysiological study in the hippocampus of the rat. Neuropharmacology. 1987 Sep;26(9):1337-42.

3. File SE., et al. Sedative effects of PK 9084 and PK 8165, alone and in combination with chlordiazepoxide. Br J Pharmacol. 1983 May;79(1):219-23.

Tel:781-999-4286 E-mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481