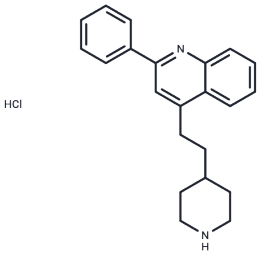
Data Sheet (Cat.No.T4688)

TargetMol
YOUR TARGET MOLECULES

Pipequaline hydrochloride

Chemical Properties



CAS No. : 80221-58-5

Formula: C22H25ClN2

Molecular Weight: 352.9

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Pipequaline hydrochloride (PK-8165 hydrochloride) 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(IC50)	GABA Receptor
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].
Animal Research	Rats: Pipequaline is dissolved in water to give injection volumes of 2 mL/kg. Rats are injected with 5, 10, and 50 mg/kg pipequaline. Infrared cells in the walls of the box provided automated measures of locomotor activity and rearing, respectively[3].

Solubility Information

Solubility	DMSO: >30 mg/mL (94.8 mM), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8337 mL	14.1683 mL	28.3366 mL
5 mM	0.5667 mL	2.8337 mL	5.6673 mL
10 mM	0.2834 mL	1.4168 mL	2.8337 mL
50 mM	0.0567 mL	0.2834 mL	0.5667 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.

Reference

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.