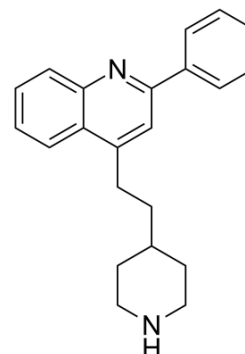


Pipequaline

Cat. No.:	HY-100140		
CAS No.:	77472-98-1		
Molecular Formula:	C ₂₂ H ₂₄ N ₂		
Molecular Weight:	316.44		
Target:	GABA Receptor		
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 32 mg/mL (101.13 mM)

* "≥" means soluble, but saturation unknown.

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	3.1602 mL	15.8008 mL	31.6016 mL
5 mM	0.6320 mL	3.1602 mL	6.3203 mL
10 mM	0.3160 mL	1.5801 mL	3.1602 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Pipequaline (PK 8165) is a partial benzodiazepine receptor agonist with anxiolytic activity^{[1][2]}.

IC₅₀ & Target

Benzodiazepine receptor^[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].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

PROTOCOL

Animal Administration ^[3]

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].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Bradwejn J, et al. Effects of PK 8165, a partial benzodiazepine receptor agonist, on cholecystokinin-induced activation of hippocampal pyramidal neurons: a microiontophoretic study in the rat. *Eur J Pharmacol.* 1985 Jun 19;112(3):415-8.

[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.

Caution: Product has not been fully validated for medical applications. For research use only.

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