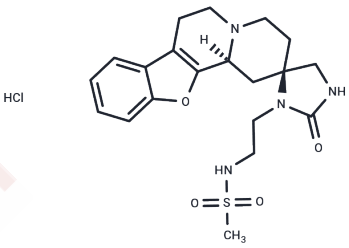
Data Sheet (Cat.No.T13285)

TargetMol

Vatinoxan hydrochloride

Chemical Properties



CAS No. :	130466-38-5
Formula:	C20H27ClN4O4S
Molecular Weight:	454.97
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	Vatinoxan hydrochloride is an antagonist of the peripheral α2 adrenergic receptors.
Targets(IC50)	Adrenergic Receptor
In vivo	When given simultaneously i.v Vatinoxan alone increases cardiac index and tissue oxygen delivery and has no deleterious adverse effects.In a dose-dependent manner Vatinoxan attenuates or prevents dexmedetomidine's systemic hemodynamic effects. A 50:1 dose ratio (Vatinoxan:dexmedetomidine) induces the least alterations in cardiovascular function[1]. Vatinoxan dose-dependently reduces bradycardia associated with dexmedetomidine and shortens the sedative effect without changing its quality. Vatinoxan may help reduce heart rate reduction in cats consciously administering dexmedetomidine[2].

Solubility Information

Solubility	H2O: 133 mg/mL (292.33 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1979 mL	10.9897 mL	21.9795 mL
5 mM	0.4396 mL	2.1979 mL	4.3959 mL
10 mM	0.2198 mL	1.099 mL	2.1979 mL
50 mM	0.044 mL	0.2198 mL	0.4396 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

Honkavaara JM, et al. The effects of increasing doses of MK-467, a peripheral alpha(2)-adrenergic receptor antagonist, on the cardiopulmonary effects of intravenous dexmedetomidine in conscious dogs. J Vet Pharmacol Ther. 2011 Aug;34(4):332-7.

Honkavaara J, et al. The effect of MK-467, a peripheral α2-adrenoceptor antagonist, on dexmedetomidine-inducedsedation and bradycardia after intravenous administration in conscious cats. Vet Anaesth Analg. 2017 Feb 22. pii: S1467-2987(16)31387-3.