Data Sheet (Cat.No.T1577)

TargetMol

Midodrine hydrochloride

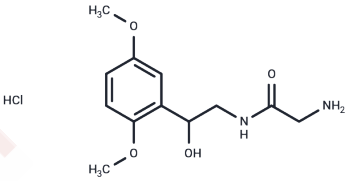
Chemical Properties

CAS No. : 3092-17-9

Formula: C12H19ClN2O4

Molecular Weight: 290.74

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	Midodrine is converted to its active metabolite, desglymidodrine by deglycination reaction. Desglymidodrine selectively binds to and activates alpha-1-adrenergic receptors of the arteriolar and venous vasculature. This causes smooth muscle contraction and leads to an elevation of blood pressure. Desglymidodrine diffuses poorly across the blood-brain barrier and is therefore not associated with effects on the central nervous system. Midodrine hydrochloride (Pro-Amatine) is the hydrochloride salt form of midodrine, a direct-acting prodrug and sympathomimetic agent with antihypotensive properties.
Targets(IC50)	Adrenergic Receptor
In vivo	The preferential cyclooxygenase-2 inhibitor etoricoxib significantly reduces the anticonvulsant action of phenytoin and significantly increases the beneficial action of diazepam against maximal electroshock and pentylenetetrazole-induced convulsions in a mouse model[1]. Etoricoxib has the potential to act as an anti-apoptotic and anti-proliferative agent in the colon[2].

Solubility Information

Solubility	DMSO: 100 mg/mL (343.95 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.4395 mL	17.1975 mL	34.395 mL
5 mM	0.6879 mL	3.4395 mL	6.879 mL
10 mM	0.3439 mL	1.7197 mL	3.4395 mL
50 mM	0.0688 mL	0.3439 mL	0.6879 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

Buckner SA, et al. Eur J Pharmacol. 2002 Aug 2;449(1-2):159-65.