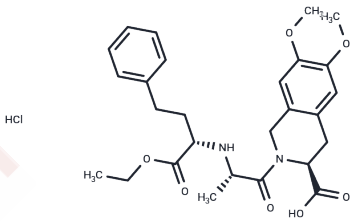
Data Sheet (Cat.No.T6595)

TargetMol

Moexipril hydrochloride

Chemical Properties



CAS No. : 82586-52-5

Formula: C27H34N2O7·HCl

Molecular Weight: 535.03

Storage: Keep away from moisture
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	Moexipril hydrochloride (Moexipril HCl) is a potent orally active nonsulfhydrylangiotensin converting enzyme (ACE)inhibitor, used for the treatment of hypertension and congestive heart failure.
Targets(IC50)	Apoptosis,RAAS,Angiotensin-converting Enzyme (ACE)
In vitro	Moexipril dose-dependently reduces the percentage of damaged neurons, as well as mitochondrial reactive oxygen species generation induced by glutamate, staurosporine or Fe2+/3+. Moexipril and enalapril attenuates staurosporine-induced neuronal apoptosis as determined by nuclear staining with Hoechst 33258. [1]
In vivo	Moexipril (0.3 mg/kg) significantly reduces brain damage after focal ischemia as compared to control mice. Moexipril (0.01 mg/kg) is able to reduce the infarct volume in the rat model after focal cerebral ischemia. [1] Moexipril reduces blood pressure after the first week of treatment but it has no apparent effect on either the proximal tibial metaphysis or the tibial shaft in ovariectomized (OVX) spontaneously hypertensive rats (SHR). Moexipril combined with hydrochlorothiazide (HCTZ) exhibits a much more potent hypotensive effect and has the same effect on bone mass and dynamic end-points as HCTZ alone. [2] Moexiprilat exhibits a higher inhibitory potency than enalaprilat against both plasma ACE and purified ACE from rabbit lung. Moexipril (0.1-30 mg/kg/day) lowers blood pressure and differentially inhibits ACE activity in plasma, lung, aorta, heart and kidney in a dose-dependent fashion. Moexipril (10 mg/kg/day) leads to comparable decreases in blood pressure, inhibition of plasma ACE and reduction of plasma angiotensinogen and to a similar attenuation of the pressor responses to angiotensin I and potentiation of the depressor responses to bradykinin. [3]

Solubility Information

Solubility	DMSO: 53.5 mg/mL (99.99 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween-80+45% Saline: 2.5 mg/mL (4.67 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and*

In vivo Formulation	*used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8691 mL	9.3453 mL	18.6905 mL
5 mM	0.3738 mL	1.8691 mL	3.7381 mL
10 mM	0.1869 mL	0.9345 mL	1.8691 mL
50 mM	0.0374 mL	0.1869 mL	0.3738 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

Ravati A, et al. Eur J Pharmacol,1999, 373(1), 21-33.
Ma YF, et al. J Endocrinol,1997, 154(3), 467-474.
Edling O, et al. J Pharmacol Exp Ther,1995, 275(2), 854-863.