Data Sheet (Cat.No.T72213)

TargetMol

Efonidipine hydrochloride

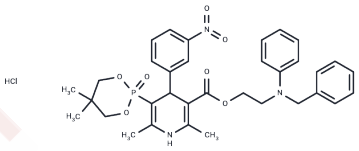
Chemical Properties

CAS No. : 111011-53-1

Formula: C34H39ClN3O7P

Molecular Weight: 668.12

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	Efonidipine HCl (NZ-105) serves as both a T-type and L-type calcium channel blocker. This compound, distinct from other calcium channel blockers, notably increases N(6), 2'-O-dibutyryladenosine 3',5'-cyclic monophosphate (dbcAMP)-induced StAR mRNA and DHEA-S production in NCI-H295R adrenocortical carcinoma cells, actions reflective of adrenocorticotropic hormone. Efonidipine uniquely inhibits calcium channels by merging tonic and use-dependent blocking methods. Its inhibitory concentrations (IC50) for I(Ca(T)) and I(Ca(L)) are 0.35 micromol/l and 1.8 nmol/l, respectively. Clinically, efonidipine administered to hypertensive patients undergoing chronic hemodialysis (20-60 mg, twice daily) demonstrated comparable blood pressure control to amlodipine (2.5-7.5 mg, once daily) over a 12-week period without significantly altering pulse rate. Furthermore, efonidipine significantly improved left ventricular ejection fraction in heart failure models without affecting blood pressure, in addition to lowering the heart rate by about 10%.
Targets(IC50)	Others,Calcium Channel

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.4967 mL	7.4837 mL	14.9674 mL
5 mM	0.2993 mL	1.4967 mL	2.9935 mL
10 mM	0.1497 mL	0.7484 mL	1.4967 mL
50 mM	0.0299 mL	0.1497 mL	0.2993 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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