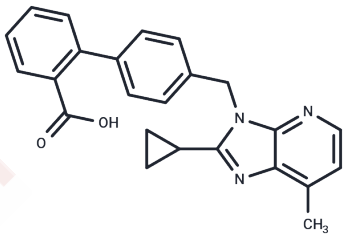
Data Sheet (Cat.No.T27229)

TargetMol

E-4177

Chemical Properties



CAS No. : 135070-05-2

Formula: C24H21N3O2

Molecular Weight: 383.44

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	E-4177 is an angiotensin II type 1 receptor (AT1R) antagonist and can be used to study cardiovascular diseases.
Targets(IC50)	RAAS,Vasopressin Receptor,PDGFR
In vitro	The AT1 receptor antagonist completely abrogated the growth-augmentative effects of AngII when concentrations over 0.1 mg/mL E-4177 were used. [1]
In vivo	In 14 adult mongrel dogs with an extremely poor circulation in the lower limbs, the femoral veins were autologously transplanted into the femoral arteries. E-4177 (10 mg/kg per day) was administered orally to seven dogs (E-4177 (+)) and placebo was administered to the other seven (E-4177 (-)). Intimal thickening induced in the dog model after transplantation and inhibition of thickening by E4177. [1]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.608 mL	13.0398 mL	26.0797 mL
5 mM	0.5216 mL	2.608 mL	5.2159 mL
10 mM	0.2608 mL	1.304 mL	2.608 mL
50 mM	0.0522 mL	0.2608 mL	0.5216 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

Kuma S, et al. Angiotensin II-induced growth of vascular smooth muscle cells is associated with modulation of cell surface area and platelet-derived growth factor receptor expression. Clin Exp Pharmacol Physiol. 2007 Mar;34(3):153-60.

Tanaka M, Umemoto S, Kawahara S, Kubo M, Itoh S, Umeji K, Matsuzaki M. Angiotensin II type 1 receptor antagonist and angiotensin-converting enzyme inhibitor altered the activation of Cu/Zn-containing superoxide dismutase in the heart of stroke-prone spontaneously hypertensive rats. Hypertens Res. 2005 Jan;28(1):67-77. PubMed PMID: 15969257.

Matsuda H, Hayashi K, Arakawa K, Naitoh M, Kubota E, Honda M, Matsumoto A, Suzuki H, Yamamoto T, Kajiya F, Saruta T. Zonal heterogeneity in action of angiotensin-converting enzyme inhibitor on renal microcirculation: role of intrarenal bradykinin. J Am Soc Nephrol. 1999 Nov;10(11):2272-82. PubMed PMID: 10541285.

Matsumoto K, Morishita R, Moriguchi A, Tomita N, Yo Y, Nishii T, Nakamura T, Higaki J, Ogihara T. Prevention of renal damage by angiotensin II blockade, accompanied by increased renal hepatocyte growth factor in experimental hypertensive rats. Hypertension. 1999 Aug;34(2):279-84. PubMed PMID: 10454454.