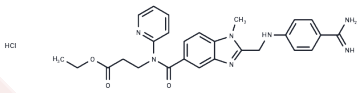
Data Sheet (Cat.No.T15046)

TargetMol

Dabigatran ethyl ester

Chemical Properties



CAS No. : 429658-95-7

Formula: C27H29N7O3

Molecular Weight: 499.56

Storage: Store at low temperature
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	Dabigatran ethyl ester (Dabigatran (ethyl ester)) is an emerging oral anticoagulant and it also is a direct inhibitor of thrombin activity.
Targets(IC50)	Thrombin
In vitro	Dabigatran etexilate was rapidly converted to Dabigatran, with peak plasma dabigatran concentrations being attained after approximately 1.5 h. there is a growing amount of clinical evidence which shows its safety and efficacy. Dabigatran may suppose a revolution in oral anticoagulation. The bioavailability of Dabigatran after p.o. administration of Dabigatran etexilate was 7.2%[1].

Solubility Information

Solubility	DMSO: 1 mg/mL (2 mM),Sonication is recommended. H2O: 1 mg/mL (2 mM),Sonication and heating to 80°C are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0018 mL	10.0088 mL	20.0176 mL
5 mM	0.4004 mL	2.0018 mL	4.0035 mL
10 mM	0.2002 mL	1.0009 mL	2.0018 mL
50 mM	0.040 mL	0.2002 mL	0.4004 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

Simon Michaelis, Anett Marais, Anna K. Schrey, et al. Dabigatran and Dabigatran Ethyl Ester: Potent Inhibitors of Ribosyldihydronicotinamide Dehydrogenase (NQO2). J. Med. Chem., 2012, 55 (8):3934-3944
Preetpal Singh Sidhu,Aiye Liang, Akul Y. Mehta,et al. Rational Design of Potent, Small, Synthetic Allosteric Inhibitors of Thrombin. J Med Chem. 2011; 54(15): 5522-5531.
Santiago Redondo, Maria-Paz Martínez, Marta Ramajo, et al. Pharmacological basis and clinical evidence of dabigatran therapy. J Hematol Oncol. 2011; 4: 53.
Stefan Blech, Thomas Ebner, Eva Ludwig-Schwellinger,et al. The Metabolism and Disposition of the Oral Direct Thrombin Inhibitor, Dabigatran, in Humans. DMD ,2008 , 36 (2) 386-399
Dabigatran