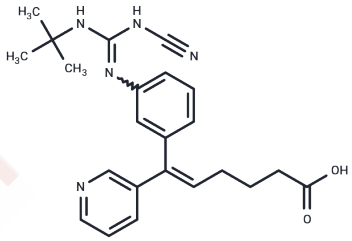
Data Sheet (Cat.No.T17039)

TargetMol

Terbogrel

Chemical Properties



CAS No. : 149979-74-8

Formula: C23H27N5O2

Molecular Weight: 405.49

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	Terbogrel is an oral thromboxane A2 receptor antagonist (IC50 is about 10 nM) and thromboxane A2 synthase inhibitor (IC50 is about 10 nM). Terbogrel is an antiplatelet compound that inhibits platelet aggregation and is a potential compound for the prevention of blood clots.
Targets(IC50)	Prostaglandin Receptor
In vitro	Terbogrel inhibits collagen-induced platelet aggregation in human platelet-rich plasma and whole blood (IC50: 310 ± 18 nM (n = 8) and 52 ± 20 nM (n = 6), respectively). Terbogrel (1 μM) fully inhibits U46619-induced platelet aggregation (IC50: 10 nM). Pretreatment of platelets with terbogrel (1 μM) completely inhibits thrombin-induced thromboxane A2 formation (2±1 ng/mL) but does not result in any inhibition of platelet aggregation. Terbogrel blocks the thromboxane A2/endoperoxide receptor on washed human platelets (IC50: 11 ± 6 nM (n = 2) and IC50: 38 ± 1 nM (n = 15) in platelet-rich plasma).[1][2]
In vivo	Terbogrel (10 mg/kg, p.o.) is rapidly and well (90%) absorbed with a systemic availability of about 30% in rats. Terbogrel (0.1-3.0 mg/kg) shows an impressive antithrombotic efficacy in rabbits.[2]

Solubility Information

Solubility	DMSO: 27.5 mg/mL (67.82 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4662 mL	12.3308 mL	24.6615 mL
5 mM	0.4932 mL	2.4662 mL	4.9323 mL
10 mM	0.2466 mL	1.2331 mL	2.4662 mL
50 mM	0.0493 mL	0.2466 mL	0.4932 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

Muck S, et al. Effects of terbogrel on platelet function and prostaglandin endoperoxide transfer. Eur J Pharmacol. 1998;344(1):45-48.

Soyka R, et al. Guanidine derivatives as combined thromboxane A2 receptor antagonists and synthase inhibitors. J Med Chem. 1999;42(7):1235-1249.