Edoxaban

Cat. No.: HY-10264

CAS No.: 480449-70-5

Molecular Formula: $C_{24}H_{30}ClN_7O_4S$

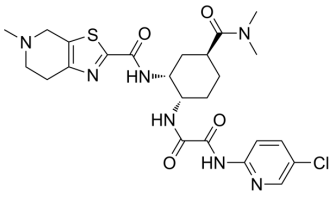
Molecular Weight: 548.06

Target: Factor Xa; Thrombin

Pathway: Metabolic Enzyme/Protease

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	2 years
	-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 10 mg/mL (18.25 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.8246 mL	9.1231 mL	18.2462 mL
	5 mM	0.3649 mL	1.8246 mL	3.6492 mL
	10 mM	0.1825 mL	0.9123 mL	1.8246 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Edoxaban (DU-176b) is an orally active, highly potent, selective, and direct Factor Xa (FXa) inhibitor with K_i values of 0.561 and 2.98 nM for free human FXa and prothrombinase. Edoxaban exhibits more than 10,000-fold selectivity over other coagulation proteases. Edoxaban can be used in preventing thromboembolic disease research[1].

IC_{50} & Target

IC50: 2.90 μM (platelet aggregation), Ki: 0.561 nM (free human FXa), 2.98 nM (prothrombinase), 0.715 nM (cynomolgus monkey FXa), 0.457 nM (rabbit FXa)[1]

In Vitro

Edoxaban (1, 1 and 5 minutes respectively) prolongs PT,TT and APTT of human plasma in a concentration-dependent manner[1].

Edoxaban inhibits thrombin-induced platelet aggregation, with an IC_{50} of 2.90 μM[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[1]

Cell Line:	Human, rat, cynomolgus monkey and rabbit plasma; Human platelet

Concentration:	
Incubation Time:	1 and 5 minutes
Result:	Antithrombin.

In Vivo

Edoxaban (0.5, 2.5 and 12.5 mg/kg; p.o.; once) significantly and dose-dependently reduces the thrombus formation and prolongs PT[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male Slc: Wistar rats (210-240 g); Male New Zealand White rabbits(2.5-3.5 kg) (Both are venous stasis thrombosis model)[1].
Dosage:	0.5, 2.5 and 12.5 mg/kg
Administration:	Oral administration; once
Result:	Inhibited exogenous FXa activity. Antithrombotic.

CUSTOMER VALIDATION

- Elife. 2022 Mar 23:11:e77444.
- Thromb Res. 2021 Jan;197:141-143.
- Molecules. 2023 Feb 28.
- Virology. 2023 Jun 21.
- Authorea. 2023 Apr 17.

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REFERENCES

[1]. Furugohri T, et al. DU-176b, a potent and orally active factor Xa inhibitor: in vitro and in vivo pharmacological profiles. J Thromb Haemost. 2008 Sep;6(9):1542-9.

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