Edoxaban hydrochloride

Cat. No.: HY-10264C

CAS No.: 480448-29-1

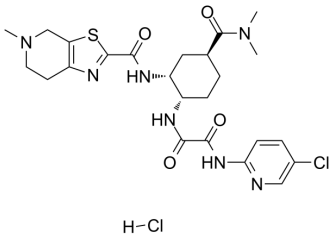
Molecular Formula: $C_{24}H_{31}Cl_2N_7O_4S$

Molecular Weight: 584.52

Target: Factor Xa; Thrombin

Pathway: Metabolic Enzyme/Protease

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

Edoxaban (DU-176b) hydrochloride 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 hydrochloride exhibits more than 10,000-fold selectivity over other coagulation proteases. Edoxaban hydrochloride can be used for 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 hydrochloride (1, 1 and 5 minutes respectively) prolongs PT,TT and APTT of human plasma in a concentration-dependent manner[1].

Edoxaban hydrochloride 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 hydrochloride (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

- Thromb Res. 2021 Jan;197:141-143.

See more customer validations on www.MedChemExpress.com

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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