Product Data Sheet

Edoxaban tosylate

Cat. No.: HY-10264A CAS No.: 480449-71-6 Molecular Formula: $C_{31}H_{38}CIN_{7}O_{7}S_{2}$

Molecular Weight: 720.26

Target: Factor Xa; Thrombin

Pathway: Metabolic Enzyme/Protease

Storage: 4°C, sealed storage, away from moisture

* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

SOLVENT & SOLUBILITY

In Vitro

DMSO: 50 mg/mL (69.42 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.3884 mL	6.9419 mL	13.8839 mL
	5 mM	0.2777 mL	1.3884 mL	2.7768 mL
	10 mM	0.1388 mL	0.6942 mL	1.3884 mL

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

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (3.47 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (3.47 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (3.47 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	Edoxaban (DU-176b) tosylate is an orally active, highly potent, selective, and direct Factor Xa (FXa) inhibitor with K _i s of 0.561 and 2.98 nM for free human FXa and prothrombinase. Edoxaban tosylate exhibits more than 10,000-fold selectivity over other coagulation proteases. Edoxaban tosylate can be used for preventing thromboembolic disease research ^[1] .
IC ₅₀ & Target	IC50: 2.90 μ M (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 tosylate $(1, 1 \text{ and } 5 \text{ minutes respectively})$ prolongs PT,TT and APTT of human plasma in a concentration-dependent manner $[1]$.

Edoxaban tosylate inhibits thrombin-induced platelet aggregation, with an IC $_{50}$ of 2.90 $\mu M^{\left[1\right]}.$

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 tosylate (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.
- Molecules. 2023 Feb 28.
- Virology. 2023 Jun 21.
- Authorea. 2023 Apr 17.

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.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA