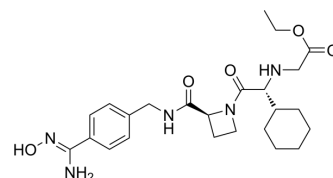


## Ximelagatran

<b>Cat. No.:</b>	HY-10787		
<b>CAS No.:</b>	192939-46-1		
<b>Molecular Formula:</b>	C <sub>24</sub> H <sub>35</sub> N <sub>5</sub> O <sub>5</sub>		
<b>Molecular Weight:</b>	473.57		
<b>Target:</b>	Thrombin		
<b>Pathway:</b>	Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 250 mg/mL (527.91 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
			10 mg	
<b>Preparing Stock Solutions</b>	<b>1 mM</b>	2.1116 mL	10.5581 mL	21.1162 mL
	<b>5 mM</b>	0.4223 mL	2.1116 mL	4.2232 mL
	<b>10 mM</b>	0.2112 mL	1.0558 mL	2.1116 mL
Please refer to the solubility information to select the appropriate solvent.				
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 2.08 mg/mL (4.39 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (4.39 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.08 mg/mL (4.39 mM); Clear solution</li> </ol>			

### BIOLOGICAL ACTIVITY

<b>Description</b>	Ximelagatran (H 376/95) is an orally active thrombin inhibitor that selectively and competitively inhibits both free and clot-bound thrombin. Ximelagatran is an anticoagulant agent with a rapid onset of anticoagulant effect, predictable, dose-dependent pharmacokinetics and pharmacodynamics <sup>[1][2]</sup> .
<b>In Vitro</b>	Ximelagatran is an orally administered direct thrombin inhibitor under development as an anticoagulant agent for prophylaxis against and treatment of thromboembolism. Ximelagatran is rapidly absorbed and quickly converted into its active form Melagatran, a reversible, active-site inhibitor of both free and clot-bound thrombin that has stable and

---

reproducible pharmacokinetic properties. Initial studies have shown Ximelagatran to have good efficacy and safety in the prevention of venous thromboembolism after total knee or total hip replacement<sup>[3]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## CUSTOMER VALIDATION

- Biotechnol Bioeng. 2021 Sep 3.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

- [1]. Colwell CW Jr, et al. Comparison of ximelagatran, an oral direct thrombin inhibitor, with enoxaparin for the prevention of venous thromboembolism following total hip replacement. A randomized, double-blind study. *J Thromb Haemost.* 2003 Oct;1(10):2119-30.
- [2]. Gao JH, et al. Effects of different anticoagulant drugs on the prevention of complications in patients after arthroplasty: A network meta-analysis. *Medicine (Baltimore).* 2017 Oct;96(40):e8059.
- [3]. Francis CW, et al. Comparison of ximelagatran with warfarin for the prevention of venous thromboembolism after total knee replacement. *N Engl J Med.* 2003 Oct 30;349(18):1703-12.
- 

**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](mailto:tech@MedChemExpress.com)

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