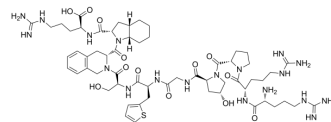


Icatibant

Cat. No.:	HY-17446		
CAS No.:	130308-48-4		
Molecular Formula:	C ₅₉ H ₈₉ N ₁₉ O ₁₃ S		
Molecular Weight:	1304.52		
Target:	Bradykinin Receptor		
Pathway:	GPCR/G Protein		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	H ₂ O : 100 mg/mL (76.66 mM; Need ultrasonic)				
	Preparing Stock Solutions	Solvent \ Mass \ Concentration	1 mg	5 mg	10 mg
		1 mM	0.7666 mL	3.8328 mL	7.6657 mL
		5 mM	0.1533 mL	0.7666 mL	1.5331 mL
		10 mM	0.0767 mL	0.3833 mL	0.7666 mL
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: PBS Solubility: 50 mg/mL (38.33 mM); Clear solution; Need ultrasonic				

BIOLOGICAL ACTIVITY

Description	Icatibant (HOE-140) is a potent and specific peptide antagonist of bradykinin B2 receptor with IC ₅₀ and K _i of 1.07 nM and 0.798 nM respectively ^{[1][2][3]} .
IC₅₀ & Target	Bradykinin B2 Receptor (B2R)
In Vitro	Icatibant (10-30 μM) potentiates angiotensin III, but not angiotensin II (contraction mediated by angiotensin AT1 receptors), and Lys-des-Arg9-bradykinin, but not des-Arg9-bradykinin (effects mediated by the bradykinin B1 receptors) ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Icatibant (0.3, or 1.5 mg/kg, subcutaneous administration twice daily in mice) shows a significant preventive effect on ulcerative Colitis ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Female mice of the CBA/J (H-2 ^k) strain ^[2] .
Dosage:	0.06, 0.3, or 1.5 mg/kg.
Administration:	Subcutaneous administration twice daily.
Result:	The length of the large intestine was 93.6±6.8 mm with the 1.5 mg/kg dosage and 94.0±4.1 mm with the 0.3 mg/kg dosage , showing a significant preventive effect on shortening.

CUSTOMER VALIDATION

- Nat Commun. 2023 May 2;14(1):2523.
- Adv Sci (Weinh). 2022 Oct 18;e2203088.
- Sci Rep. 2020 Aug 25;10(1):14160.
- Biochem Biophys Res Commun. 2016 Apr 29;473(2):396-402.
- J Renin Angiotensin Aldosterone Syst. 14 Jun 2022.

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REFERENCES

- [1]. Hock FJ, et al. Hoe 140 a new potent and long acting bradykinin-antagonist: in vitro studies. Br J Pharmacol. 1991 Mar;102(3):769-73.
- [2]. Y Arai, et al. Effect of Icatibant, a Bradykinin B2 Receptor Antagonist, on the Development of Experimental Ulcerative Colitis in Mice. Dig Dis Sci. 1999 Apr;44(4):845-51.
- [3]. Marie-Thérèse Bawolak, et al The Bradykinin B2 Receptor Antagonist Icatibant (Hoe 140) Blocks Aminopeptidase N at Micromolar Concentrations: Off-Target Alterations of Signaling Mediated by the Bradykinin B1 and Angiotensin Receptors. Eur J Pharmacol. 2006 Dec 3;551(1-3):108-11.

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

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