Icatibant acetate

Cat. No.: HY-108896

CAS No.: 138614-30-9

Molecular Formula: $C_{61}H_{93}N_{19}O_{15}S$

Molecular Weight: 1364.57

Target: Bradykinin Receptor

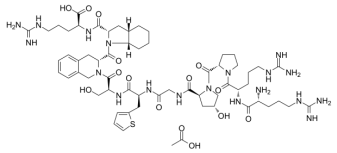
Pathway: GPCR/G Protein

Storage: Sealed storage, away from moisture and light

Powder -80°C 2 years

-20°C 1 year

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



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (73.28 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	0.7328 mL	3.6642 mL	7.3283 mL
5 mM	0.1466 mL	0.7328 mL	1.4657 mL
10 mM	0.0733 mL	0.3664 mL	0.7328 mL

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

BIOLOGICAL ACTIVITY

Description

Icatibant acetate (HOE-140 acetate) is a potent and specific peptide antagonist of bradykinin B2 receptor with an IC_{50} and K_i of 1.07 nM and 0.798 nM respectively[1][2][3].

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 (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.

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

- 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

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