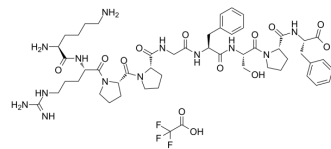


Lys-[Des-Arg9]Bradykinin TFA

Cat. No.:	HY-103295A
CAS No.:	2763588-90-3
Molecular Formula:	C ₅₂ H ₇₄ F ₃ N ₁₃ O ₁₃
Molecular Weight:	1146.22
Sequence Shortening:	KRPPGFSPF
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 : 110 mg/mL (95.97 mM; Need ultrasonic)
 H₂O : 50 mg/mL (43.62 mM; Need ultrasonic)

Preparing Stock Solutions	Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	0.8724 mL	4.3622 mL	8.7243 mL
	5 mM	0.1745 mL	0.8724 mL	1.7449 mL
	10 mM	0.0872 mL	0.4362 mL	0.8724 mL

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

In Vivo

- Add each solvent one by one: PBS
Solubility: 100 mg/mL (87.24 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.75 mg/mL (2.40 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.75 mg/mL (2.40 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.75 mg/mL (2.40 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Lys-[Des-Arg9]Bradykinin TFA, a naturally occurring kinin, is a potent and highly selective bradykinin B1 receptor agonist with a K_i of 0.12 nM, 1.7 nM and 0.23 nM for human, mouse and rabbit B1 receptors, respectively. Lys-[Des-Arg9]Bradykinin

	TFA has low inhibitory activity on B2 receptors ^{[1][2]} .
IC₅₀ & Target	Bradykinin B1 Receptor (B1R)
In Vitro	Lys-[Des-Arg9]Bradykinin is formed by the proteolytic cleavage of bradykinin, exerts its effects through bradykinin B1 receptor (B1R) ^[1] . Lys-[Des-Arg9]Bradykinin (Lda-BK; 10 μM) enhances the secretion of IL-12p70 and inhibits the secretion of IL-12p40 by mature hMo-DCs. Pretreatment with Lys-[Des-Arg9]Bradykinin treatment reduces the migration of mature hMo-DCs toward medium alone, suggesting that Lys-[Des-Arg9]Bradykinin may inhibit the chemokinesis of mature hMo-DCs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Lys-[Des-Arg9]Bradykinin (1 μg; intra-arterial injection; New Zealand White rabbits) treatment reduces peripheral vascular resistance in LPS-induced rabbits, but the effect is brief (T _{1/2} is 118-195 s) ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Rosalind Gulliver, et al. Lys-des[Arg9]-bradykinin alters migration and production of interleukin-12 in monocyte-derived dendritic cells. *Am J Respir Cell Mol Biol.* 2011 Sep;45(3):542-9.
- [2]. L M Fredrik Leeb-Lundberg, et al. International union of pharmacology. XLV. Classification of the kinin receptor family: from molecular mechanisms to pathophysiological consequences. *Pharmacol Rev.* 2005 Mar;57(1):27-77.
- [3]. G Drapeau, et al. Hypotensive effects of Lys-des-Arg9-bradykinin and metabolically protected agonists of B1 receptors for kinins. *J Pharmacol Exp Ther.* 1991 Dec;259(3):997-1003.

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