

α-CGRP, rat TFA

Cat. No.:	HY-P0203A	
Molecular Formula:	C ₁₆₂ H ₂₆₂ N ₅₀ O ₅₂ S ₂ C ₂ HF ₃ O ₂	
Molecular Weight:	3920.27	
Sequence Shortening:	SCNTATCVTHRLAGLLSRGGVVKDNFVPTNVGSEAF-NH ₂ (Disulfide bridge:Cys2-Cys7)	SCNTATCVTHRLAGLLSRGGVVKDNFVPTNVGSEAF-NH ₂ (Disulfide bridge:Cys2-Cys7) (TFA salt)
Target:	CGRP Receptor	
Pathway:	GPCR/G Protein; Neuronal Signaling	
Storage:	Sealed storage, away from moisture	
	Powder -80°C 2 years	
	-20°C 1 year	
	* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)	

SOLVENT & SOLUBILITY

In Vitro

H₂O : 25 mg/mL (6.38 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	0.2551 mL	1.2754 mL	2.5508 mL
	5 mM	0.0510 mL	0.2551 mL	0.5102 mL
	10 mM	---	---	---

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

BIOLOGICAL ACTIVITY

Description

α-CGRP, rat TFA, a neuropeptide (calcitonin gene-related peptide (CGRP)) mainly expressed in neuromuscular junction, is a potent vasodilator. α-CGRP, rat TFA can lead to a fall in blood pressure and an increase in heart rate by peripheral administration, also relax colonie smooth muscle. α-CGRP, rat TFA has the potential in cardiovascular, pro-inflammatory, migraine and metabolic studies^{[1][2][3]}.

In Vivo

α-CGRP, rat TFA (<0.1 mL; injected above the aorta, single dosage) increases heart rate in a dose dependent fashion^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male Sprague-Dawley rats ^[1]
Dosage:	<0.1 mL
Administration:	Injected above the aorta, single dosage
Result:	Increased heart rate in a dose dependent fashion.

REFERENCES

- [1]. Holman JJ, et al. Human alpha- and beta-CGRP and rat alpha-CGRP are coronary vasodilators in the rat. *Peptides*. 1986 Mar-Apr;7(2):231-5.
- [2]. Arulmani U, et al. Effects of the calcitonin gene-related peptide (CGRP) receptor antagonist BIBN4096BS on alpha-CGRP-induced regional haemodynamic changes in anaesthetised rats. *Basic Clin Pharmacol Toxicol*. 2004 Jun;94(6):291-7.
- [3]. Gorzi A, et al. Muscle gene expression of CGRP- α , CGRP receptor, nAChR- β , and GDNF in response to different endurance training protocols of Wistar rats. *Mol Biol Rep*. 2020 Jul;47(7):5305-5314.
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Caution: Product has not been fully validated for medical applications. For research use only.

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