α-CGRP (mouse, rat)

Cat. No.:	HY-P0203
CAS No.:	83651-90-5
Molecular Formula:	$C_{162}H_{262}N_{50}O_{52}S_2$
Molecular Weight:	3806.25
Sequence:	Ser-Cys-Asn-Thr-Ala-Thr-Cys-Val-Thr-His-Arg-Leu-Ala-Gly-Leu-Leu-Ser-Arg-Ser-Gly-Gly-Val-Val-Lys-Asp-Asn-Phe-Val-Pro-Thr-Asn-Val-Gly-Ser-Glu-Ala-Phe-NH2 (Disulfide bridge:Cys2-Cys7)
Sequence Shortening:	SCNTATCVTHRLAGLLSRSGGVVKDNFVPTNVGSEAF-NH2 (Disulfide bridge:Cys2-Cys7)
Target:	CGRP Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	α-CGRP (mouse, rat), a neuropeptide (calcitonin gene-related peptide (CGRP)) mainly expressed in neuromuscular junction, is a potent vasodilator. α-CGRP (mouse, rat) can lead to a fall in blood pressure and an increase in heart rate by peripheral administration, also relax colonie smooth muscle. α-CGRP (mouse, rat) has the potential in cardiovascular, pro-inflammatory, migraine and metabolic studies[1][2][3][4].
In Vitro	α-CGRP (mouse, rat) can regulate the innate lymphoid cell response in 2 groups[1]. α-CGRP (mouse, rat) regulates insulin secretion and reduces the risk of type 2 diabetes[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	α-CGRP (mouse, rat) (0.25, 0.5, 1 μg/kg/min, intravenous) dose-dependent decreases mean arterial blood pressure, while heart rate and systemic vascular conduction increased, while cardiac output remained unchanged[3]. α-CGRP (mouse, rat) plays an important role in the regulation of Kainic acid (KA) induced pyramid-cell death in hippocampal CA3 region[4]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Whitby K, et al. Castanospermine, a potent inhibitor of dengue virus infection in vitro and in vivo. J Virol. 2005 Jul;79(14):8698-706.

[2]. Xu H, et al. Transcriptional Atlas of Intestinal Immune Cells Reveals that Neuropeptide α-CGRP Modulates Group 2 Innate Lymphoid Cell Responses. Immunity. 2019 Oct 15;51(4):696-708.e9.

[3]. 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.

[4]. Park SH, et al. Role of α-CGRP in the regulation of neurotoxic responses induced by kainic acid in mice. Peptides. 2013 Jun;44:158-62.

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

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