

α -CGRP (mouse, rat)

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| 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-NH ₂ (Disulfide bridge: Cys2-Cys7) |
| Sequence Shortening: | SCNTATCVTHRLAGLLSRSGGVKDNFVPTNVGSEAF-NH ₂ (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

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| 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 μ g/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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