Peptidomic studies using mass spectrometry has led to the identification of a number of unknown peptides in mammalian systems. However, these studies are limited since most peptides found this way are protein fragments. **Neuroendocrine Regulatory Peptides -1 (NERP-1) and -2 (NERP-2)** were recently identified by a novel approach developed to increase the probability for discovering bioactive peptides [1]. In this approach, researchers increased the likelihood of identifying bioactive peptides by focusing on post-translational C-terminal amidation, a characteristic of many known bioactive peptides. They examined peptides in cell culture supernatants from an endocrine cell line known to secrete C-terminal amidated calcitonin and calcitonin-related peptides at a high rate. Two novel peptides were found this way and named **Neuroendocrine Regulatory Peptides -1 (NERP-1)** and -2 (NERP-2). These bioactive peptides are derived from the neurosecretory protein VGF which may play a role in regulating energy homeostasis, metabolism [2] and synaptic plasticity [3], though functional studies have been limited. Specific antisera to NERP-1 and NERP-2 were used to further characterize these peptides and helped to determine the presence of the NERPs in the nuclei of rat hypothalamus. In addition, NERP’s colocalized with vasopressin, which controls renal excretion, thereby providing a clue to the biological activity of these novel peptides. NERP’s were found to suppress vasopressin release which was reversed by NERP’s antisera. Peptides International and the Peptide Institute are pleased to offer NERP-1 and NERP-2 as novel tools for furthering the understanding of fluid homeostasis.

**CODE** | **PRODUCT** | **QTY**
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PNR-4441-s | Neuroendocrine Regulatory Peptide-1 (Human) RPESALLGSEAGERRLQLQGLAQVHEA-NH$_2$ H-Arg-Pro-Glu-Ser-Ala-Leu-Gly-Gly-Ser-Glu-Ala-Gly-Glu-Arg-Leu-Val-Gln-Gly-Leu-Ala-Gln-Val-Glu-Ala- NH$_2$ (M.W. 2679.00) C$_{113}$H$_{192}$N$_{36}$O$_{39}$ Endogenous Suppressor of Vasopressin Release | 0.1 mg vial
PNR-4442-s | Neuroendocrine Regulatory Peptide-1 (Rat) LEGSFLGGSERGRGRLQGLAQVHEA-NH$_2$ H-Leu-Glu-Gly-Ser-Phe-Leu-Gly-Gly-Ser-Glu-Ala-Gly-Arg-Leu-Val-Gln-Gly-Leu-Ala-Gln-Val-Glu-Ala-NH$_2$ (M.W. 2558.80) C$_{110}$H$_{180}$N$_{32}$O$_{38}$ Endogenous Suppressor of Vasopressin Release | 0.1 mg vial
PNR-4444-s | Neuroendocrine Regulatory Peptide-2 (Rat) EAEATRQAAAQEERLADSDIIIQLQGARQRGLG-NH$_2$ Pyr-Ala-Glu-Ala-Thr-Arg-Gln-Ala-Ala-Glu-Arg-Leu-Ala-Asp-Leu-Ala-Ser-Asp-Leu-Leu-Gln-Tyr-Leu-Leu-Gln-Gly-Gly-Ala-Arg-Gln-Asp-Leu-Gly-NH$_2$ (M.W. 4122.50) C$_{175}$H$_{290}$N$_{56}$O$_{59}$ Endogenous Suppressor of Vasopressin Release | 0.1 mg vial

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