

GRP Blocking Peptide (Center)
Synthetic peptide
Catalog # BP21751c**Specification**

GRP Blocking Peptide (Center) - Product InformationPrimary Accession [P07492](#)**GRP Blocking Peptide (Center) - Additional Information**

Gene ID 2922

Other Names

Gastrin-releasing peptide, GRP, Neuromedin-C, GRP-10, GRP

Target/Specificity

The synthetic peptide sequence is selected from aa 87-97 of HUMAN GRP

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GRP Blocking Peptide (Center) - Protein Information**Name** GRP**Function**

Stimulates the release of gastrin and other gastrointestinal hormones (By similarity). Contributes to the perception of prurient stimuli and to the transmission of itch signals in the spinal cord that promote scratching behavior (By similarity). Contributes primarily to nonhistaminergic itch sensation (By similarity). In one study, shown to act in the amygdala as part of an inhibitory network which inhibits memory specifically related to learned fear (By similarity). In another study, shown to act on vasoactive intestinal peptide (VIP)-expressing cells in the auditory cortex, most likely via extrasynaptic diffusion from local and long-range sources, to mediate disinhibition of glutamatergic cells via VIP cell-specific GRPR signaling which leads to enhanced auditory fear memories (By similarity). Contributes to the regulation of food intake (By similarity). Inhibits voltage-gated sodium channels but enhances voltage-gated potassium channels in hippocampal neurons (By similarity). Induces sighing by acting directly on the pre-Botzinger complex, a cluster of several thousand neurons in the ventrolateral medulla responsible for inspiration during respiratory activity (By similarity).

Cellular Location

Secreted. Cytoplasmic vesicle, secretory vesicle lumen {ECO:0000250|UniProtKB:Q863C3}. Cell projection, neuron projection {ECO:0000250|UniProtKB:Q8R1I2}. Note=In neurons of the retrotrapezoid nucleus/parafacial respiratory group, expressed on neuron projections which project into the pre-Botzinger complex {ECO:0000250|UniProtKB:Q8R1I2}

GRP Blocking Peptide (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

GRP Blocking Peptide (Center) - Images

GRP Blocking Peptide (Center) - Background

GRP stimulates gastrin release as well as other gastrointestinal hormones. Operates as a negative feedback regulating fear and established a causal relationship between GRP- receptor gene expression, long-term potentiation, and amygdala- dependent memory for fear (By similarity).

GRP Blocking Peptide (Center) - References

Spindel E.R.,et al.Proc. Natl. Acad. Sci. U.S.A. 83:19-23(1986).
Lebacqz-Verheyden A.-M.,et al.Mol. Cell. Biol. 8:3129-3135(1988).
Sausville E.A.,et al.J. Biol. Chem. 261:2451-2457(1986).
Kalnina N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Nusbaum C.,et al.Nature 437:551-555(2005).