

**GRPR Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP9790c****Specification**

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**GRPR Antibody (Center) Blocking Peptide - Product Information**Primary Accession [P30550](#)**GRPR Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 2925**Other Names**

Gastrin-releasing peptide receptor, GRP-R, GRP-preferring bombesin receptor, GRPR

**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.

**GRPR Antibody (Center) Blocking Peptide - Protein Information****Name** GRPR**Function**

Receptor for gastrin-releasing peptide (GRP) (PubMed:<a href="http://www.uniprot.org/citations/1655761" target="\_blank">1655761</a>). Signals via association with G proteins that activate a phosphatidylinositol-calcium second messenger system, resulting in Akt phosphorylation. Contributes to the regulation of food intake. Contributes to the perception of prurient stimuli and transmission of itch signals in the spinal cord that promote scratching behavior, but does not play a role in the perception of pain. Contributes primarily to nonhistaminergic itch sensation. 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 contribute to disinhibition of glutamatergic cells in the auditory cortex via signaling on vasoactive intestinal peptide- expressing cells which leads to enhanced auditory fear memories (By similarity). Contributes to the induction of sighing through signaling in the pre-Botzinger complex, a cluster of several thousand neurons in the ventrolateral medulla responsible for inspiration during respiratory activity (By similarity).

**Cellular Location**

Cell membrane; Multi-pass membrane protein

**Tissue Location**

Highly expressed in pancreas (PubMed:11245983). Also expressed in stomach, adrenal cortex and brain (PubMed:11245983) In brain, expressed in cells throughout the cortex (PubMed:34610277)

### **GRPR Antibody (Center) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

### **GRPR Antibody (Center) Blocking Peptide - Images**

### **GRPR Antibody (Center) Blocking Peptide - Background**

Gastrin-releasing peptide (GRP) regulates numerous functions of the gastrointestinal and central nervous systems, including release of gastrointestinal hormones, smooth muscle cell contraction, and epithelial cell proliferation and is a potent mitogen for neoplastic tissues. The effects of GRP are mediated through the gastrin-releasing peptide receptor. This receptor is a glycosylated, 7-transmembrane G-protein coupled receptor that activates the phospholipase C signaling pathway. The receptor is aberrantly expressed in numerous cancers such as those of the lung, colon, and prostate. An individual with autism and multiple exostoses was found to have a balanced translocation between chromosome 8 and a chromosome X breakpoint located within the gastrin-releasing peptide receptor gene.

### **GRPR Antibody (Center) Blocking Peptide - References**

Guey, L.T., et al. Eur. Urol. 57(2):283-292(2010)Chapuis, J., et al. Mol. Psychiatry 14(11):1004-1016(2009)Chao, C., et al. J. Surg. Res. 156(1):26-31(2009)Ananias, H.J., et al. Prostate 69(10):1101-1108(2009)Fleischmann, A., et al. Endocr. Relat. Cancer 16(2):623-633(2009)