

### **GRP Antibody (Center)**

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21751c

## **Specification**

# **GRP Antibody (Center) - Product Information**

Application WB,E
Primary Accession P07492
Reactivity Human
Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 16213

# **GRP Antibody (Center) - Additional Information**

#### **Gene ID 2922**

#### **Other Names**

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

### Target/Specificity

This GRP antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 67-97 amino acids from the Central region of human GRP.

#### **Dilution**

WB~~1:2000

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

GRP Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## **GRP Antibody (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**

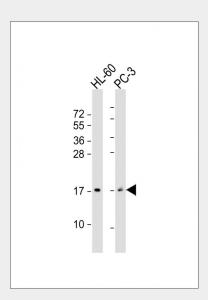
Secreted. Cytoplasmic vesicle, secretory vesicle lumen {ECO:0000250|UniProtKB:Q863C3}. Cell projection, neuron projection {ECO:0000250|UniProtKB:Q8R1I2}. Note=In neurons of the retrotrapezoid nucleus/parafacial respiratory group, expressed on neuron projections which project into the pre-Botzinger complex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

## **GRP Antibody (Center) - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## **GRP Antibody (Center) - Images**



All lanes : Anti-GRP Antibody (Center) at 1:2000 dilution Lane 1: HL-60 whole cell lysate Lane 2: PC-3 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 16 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

## GRP Antibody (Center) - Background





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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 Antibody (Center) - References**

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