

GRPR (A-17): sc-26838

BACKGROUND

Gastrin-releasing peptide (GRP) stimulates the release of gastrin as well as other gastrointestinal hormones in addition to acting as an autocrine growth factor for certain cell types. The human GRP receptor (GRPR) gene maps to chromosome Xp21.2-p22.3 and encodes a seven transmembrane domain protein. Whereas normal human pancreas and stomach express GRPR, normal lung, colon and prostate do not. Well-differentiated colon tumors coexpress GRP and GRPR. Prostate carcinoma also expresses GRPR. Following exposure to nicotine, human lung fibroblasts increase expression of GRPR. Aberrant GRPR expression occurs more frequently in female normal lung than male normal lung, and may account for the increased susceptibility of women to tobacco-induced lung cancer.

REFERENCES

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4. Terashi, H., Itami, S., Tadokoro, T., Takeyama, M., Katagiri, K. and Takayasu, S. 1998. Growth stimulation of normal melanocytes and nevocellular nevus cells by gastrin releasing peptide (GRP). *J. Dermatol. Sci.* 17: 93-100.
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6. Sun, B., Halmos, G., Schally, A.V., Wang, X. and Martinez, M. 2000. Presence of receptors for bombesin/gastrin-releasing peptide and mRNA for three receptor subtypes in human prostate cancers. *Prostate* 42: 295-303.

CHROMOSOMAL LOCATION

Genetic locus: Grpr (mouse) mapping to X F5.

SOURCE

GRPR (A-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of GRPR of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-26838 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

GRPR (A-17) is recommended for detection of GRPR of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for GRPR siRNA (m): sc-145783, GRPR shRNA Plasmid (m): sc-145783-SH and GRPR shRNA (m) Lentiviral Particles: sc-145783-V.

Molecular Weight of glycosylated GRPR: 70-95 kDa.

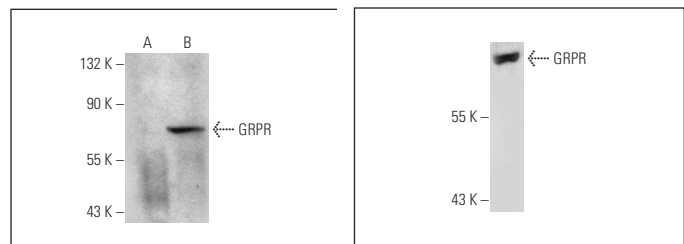
Molecular Weight of endogenous GRPR: 43 kDa.

Positive Controls: LADMAC whole cell lysate: sc-364189.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



GRPR (A-17): sc-26838. Western blot analysis of GRPR expression in non-transfected: sc-117750 (A) and human GRPR transfected: sc-110069 (B) CHO whole cell lysates.

GRPR (A-17): sc-26838. Western blot analysis of GRPR expression in LADMAC whole cell lysate.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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Try **GRPR (D-1): sc-398549**, our highly recommended monoclonal alternative to GRPR (A-17).