

GRPR (H-50): sc-32903

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 Xp22.2 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

1. Spindel, E.R., et al. 1990. Cloning and functional characterization of a complementary DNA encoding the murine fibroblast bombesin/gastrin-releasing peptide receptor. *Mol. Endocrinol.* 4: 1956-1963.
2. Maslen, G.L., et al. 1993. Comparative mapping of the Grpr locus on the X chromosomes of man and mouse. *Genomics* 17: 106-109.
3. Sachs, G., et al. 1997. Physiology of isolated gastric endocrine cells. *Annu. Rev. Physiol.* 59: 243-256.

CHROMOSOMAL LOCATION

Genetic locus: GRPR (human) mapping to Xp22.2.

SOURCE

GRPR (H-50) is an affinity purified rabbit polyclonal antibody raised against amino acids 1-50 mapping at the N-terminus of GRPR of human origin.

PRODUCT

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

RESEARCH USE

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

APPLICATIONS

GRPR (H-50) is recommended for detection of GRPR of human 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 (h): sc-106924, GRPR shRNA Plasmid (h): sc-106924-SH and GRPR shRNA (h) Lentiviral Particles: sc-106924-V.

Molecular Weight of endogenous GRPR: 43 kDa.

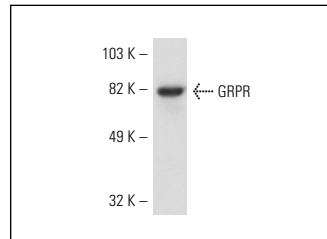
Molecular Weight of glycosylated GRPR: 70-95 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2285.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



GRPR (H-50): sc-32903. Western blot analysis of GRPR expression in MIA PaCa-2 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Ananias, H.J., et al. 2009. Expression of the gastrin-releasing peptide receptor, the prostate stem cell antigen and the prostate-specific membrane antigen in lymph node and bone metastases of prostate cancer. *Prostate* 69: 1101-1108.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **GRPR (D-1): sc-398549** or **GRPR (F-6): sc-377316**, our highly recommended monoclonal alternatives to GRPR (H-50).