## SANTA CRUZ BIOTECHNOLOGY, INC.

# GRPR (F-18): sc-26836



#### 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. Aberrent 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.

#### CHROMOSOMAL LOCATION

Genetic locus: GRPR (human) mapping to Xp22.2; Grpr (mouse) mapping to X F5.

## SOURCE

GRPR (F-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of GRPR of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-26836 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## **APPLICATIONS**

GRPR (F-18) is recommended for detection of GRPR of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

GRPR (F-18) is also recommended for detection of GRPR in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GRPR siRNA (h): sc-106924, GRPR siRNA (m): sc-145783, GRPR shRNA Plasmid (h): sc-106924-SH, GRPR shRNA Plasmid (m): sc-145783-SH, GRPR shRNA (h) Lentiviral Particles: sc-106924-V and GRPR shRNA (m) Lentiviral Particles: sc-145783-V.

Molecular Weight of endogenous GRPR: 43 kDa.

Molecular Weight of glycosylated GRPR: 70-95 kDa.

Positive Controls: A549 cell lysate: sc-2413, Caco-2 cell lysate: sc-2262 or 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



expression in A549 (A) and Caco-2 (B) whole cell lysates.

#### **RESEARCH USE**

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

#### PROTOCOLS

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

## MONOS Satisfation Guaranteed

Try **GRPR (D-1):** sc-398549 or **GRPR (F-6):** sc-377316, our highly recommended monoclonal alternatives to GRPR (F-18).