

GPRC5C (N-14): sc-82617

BACKGROUND

G protein-coupled receptors (GPRs), also known as seven transmembrane receptors, heptahelical receptors or 7TM receptors, comprise a superfamily of proteins that play a role in many different stimulus-response pathways. G protein-coupled receptors translate extracellular signals into intracellular signals (G protein activation) and they respond to a variety of signaling molecules, such as hormones and neurotransmitters. GPRC5C (G protein-coupled receptor, family C, group 5, member C), also known as RAIG3, is a 441 amino acid multi-pass membrane protein that localizes to cytoplasmic vesicles and belongs to the G protein-coupled receptor family. Expressed at high levels in stomach, liver, prostate, kidney and pancreas, GPRC5C is thought to function as a retinoic acid-inducible GPR that may play a role in signaling events throughout the cell. GPRC5C is subject to DNA damage-dependent phosphorylation, probably by ATM or ATR.

REFERENCES

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- Schöneberg, T., et al. 2002. The structural basis of G-protein-coupled receptor function and dysfunction in human diseases. *Rev. Physiol. Biochem. Pharmacol.* 144: 143-227.
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CHROMOSOMAL LOCATION

Genetic locus: GPRC5C (human) mapping to 17q25.1; Gprc5c (mouse) mapping to 11 E2.

SOURCE

GPRC5C (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of GPRC5C of human origin.

RESEARCH USE

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

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-82617 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GPRC5C (N-14) is recommended for detection of GPRC5C of mouse, rat and 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); non cross-reactive with other GPRC family members.

GPRC5C (N-14) is also recommended for detection of GPRC5C in additional species, including equine, canine and bovine.

Suitable for use as control antibody for GPRC5C siRNA (h): sc-75196, GPRC5C siRNA (m): sc-75197, GPRC5C shRNA Plasmid (h): sc-75196-SH, GPRC5C shRNA Plasmid (m): sc-75197-SH, GPRC5C shRNA (h) Lentiviral Particles: sc-75196-V and GPRC5C shRNA (m) Lentiviral Particles: sc-75197-V.

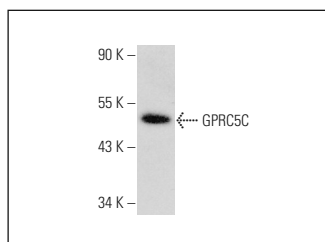
Molecular Weight of GPRC5C: 48 kDa.

Positive Controls: human stomach extract: sc-363780.

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



GPRC5C (N-14): sc-82617. Western blot analysis of GPRC5C expression in human stomach tissue extract.

STORAGE

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