

GPR161 (P-23): sc-101966

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. GPR161 (G protein-coupled receptor 161), also known as RE2, is a 529 amino acid protein that belongs to the G protein-coupled receptor family. Localized to the cell membrane, GPR161 is a multi-pass membrane protein that functions as an orphan receptor, relaying extracellular signals to the intracellular environment. Two isoforms of GPR161 exist due to alternative splicing events.

REFERENCES

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- Schöneberg, T., et al. 1999. Structural basis of G protein-coupled receptor function. *Mol. Cell. Endocrinol.* 151: 181-193.
- Schwalbe, H. and Wess, G. 2002. Dissecting G-protein-coupled receptors: structure, function, and ligand interaction. *ChemBiochem* 3: 915-919.
- Small, K.M., et al. 2002. False positive non-synonymous polymorphisms of G-protein coupled receptor genes. *FEBS Lett.* 516: 253-256.
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- Matteson, P.G., et al. 2008. The orphan G protein-coupled receptor, GPR161, encodes the vacuolated lens locus and controls neurulation and lens development. *Proc. Natl. Acad. Sci. USA* 105: 2088-2093.

CHROMOSOMAL LOCATION

Genetic locus: GPR161 (human) mapping to 1q24.2.

SOURCE

GPR161 (P-23) is a purified rabbit polyclonal antibody raised against GPR161 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

STORAGE

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

APPLICATIONS

GPR161 (P-23) is recommended for detection of GPR161 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), immunohistochemistry (including paraffin-embedded sections) (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 GPR161 siRNA (h): sc-88224, GPR161 shRNA Plasmid (h): sc-88224-SH and GPR161 shRNA (h) Lentiviral Particles: sc-88224-V.

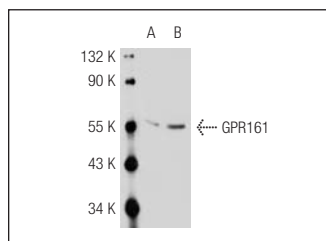
Molecular Weight of GPR161: 59 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or GPR161 (h): 293T lysate: sc-114770.

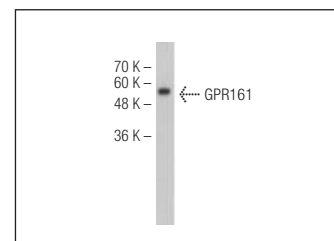
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



GPR161 (P-23): sc-101966. Western blot analysis of GPR161 expression in non-transfected: sc-117752 (A) and human GPR161 transfected: sc-114770 (B) 293T whole cell lysates.



GPR161 (P-23): sc-101966. Western blot analysis of GPR161 expression in Hep G2 whole cell lysate.

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.