

GPR126 (S-12): sc-107579

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. GPR126 (G protein-coupled receptor 126), also known as APG1, DREG, VIGR or PS1TP2, is a 1,221 amino acid multi-pass membrane protein that contains one pentaxin domain, one GPS domain and one CUB domain. Existing as three alternatively spliced isoforms, GPR126 functions as an orphan G protein-coupled receptor that, when subject to genetic variation, may influence stature and adult height.

REFERENCES

1. Lee, D.K., et al. 2001. Discovery and mapping of ten novel G protein-coupled receptor genes. *Gene* 275: 83-91.
2. Stehlik, C., et al. 2004. VIGR-a novel inducible adhesion family G protein coupled receptor in endothelial cells. *FEBS Lett.* 569: 149-155.
3. Bjarnadóttir, T.K., et al. 2004. The human and mouse repertoire of the adhesion family of G protein-coupled receptors. *Genomics* 84: 23-33.
4. Gudbjartsson, D.F., et al. 2008. Many sequence variants affecting diversity of adult human height. *Nat. Genet.* 40: 609-615.
5. Amisten, S., et al. 2008. Gene expression profiling for the identification of G protein-coupled receptors in human platelets. *Thromb. Res.* 122: 47-57.
6. Online Mendelian Inheritance in Man, OMIM™. 2009. Johns Hopkins University, Baltimore, MD. MIM Number: 612243. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: GPR126 (human) mapping to 6q24.1; Gpr126 (mouse) mapping to 10 A2.

SOURCE

GPR126 (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of GPR126 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.

Blocking peptide available for competition studies, sc-107579 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

GPR126 (S-12) is recommended for detection of GPR126 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).

GPR126 (S-12) is also recommended for detection of GPR126 in additional species, including equine and canine.

Suitable for use as control antibody for GPR126 siRNA (h): sc-95410, GPR126 siRNA (m): sc-145700, GPR126 shRNA Plasmid (h): sc-95410-SH, GPR126 shRNA Plasmid (m): sc-145700-SH, GPR126 shRNA (h) Lentiviral Particles: sc-95410-V and GPR126 shRNA (m) Lentiviral Particles: sc-145700-V.

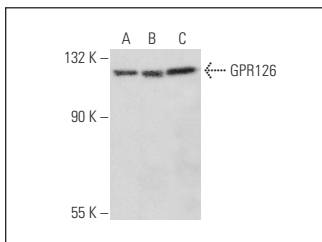
Molecular Weight of GPR126: 136 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, HUV-EC-C whole cell lysate: sc-364180 or HEK293 whole cell lysate: sc-45136.

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



GPR126 (S-12): sc-107579. Western blot analysis of GPR126 expression in HEK293 (A), HUV-EC-C (B) and HeLa (C) whole cell lysates.

RESEARCH USE

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