



GPR126 (D-14): sc-107577

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

- Lee, D.K., Nguyen, T., Lynch, K.R., Cheng, R., Vanti, W.B., Arkhitko, O., Lewis, T., Evans, J.F., George, S.R. and O'Dowd, B.F. 2001. Discovery and mapping of ten novel G protein-coupled receptor genes. *Gene* 275: 83-91.
- Stehlik, C., Kroismayr, R., Dorfleutner, A., Binder, B.R. and Lipp, J. 2004. VIGR—a novel inducible adhesion family G protein coupled receptor in endothelial cells. *FEBS Lett.* 569: 149-155.
- Bjarnadóttir, T.K., Fredriksson, R., Höglund, P.J., Gloriam, D.E., Lagerström, M.C. and Schiöth, H.B. 2004. The human and mouse repertoire of the adhesion family of G protein-coupled receptors. *Genomics.* 84: 23-33.
- Gudbjartsson, D.F., Walters, G.B., Thorleifsson, G., Stefansson, H., Halldorsson, B.V., Zusmanovich, P., Sulem, P., Thorlacius, S., Gylfason, A., Steinberg, S., Helgadóttir, A., Ingason, A., Steinthorsdóttir, V., Olafsdóttir, E.J., Olafsdóttir, G.H., Jonsson, T., Borch-Johnsen, K., Hansen, T., Andersen, G., Jorgensen, T., Pedersen, O., Aben, K.K., Witjes, J.A., Swinkels, D.W., den Heijer, M., Franke, B., Verbeek, A.L., Becker, D.M., Yanek, L.R., Becker, L.C., Tryggvadóttir, L., Rafnar, T., Gulcher, J., Kiemenev, L.A., Kong, A., Thorsteinsdóttir, U. and Stefansson, K. 2008. Many sequence variants affecting diversity of adult human height. *Nat. Genet.* 40: 609-615.
- Amisten, S., Braun, O.O., Bengtsson, A. and Erlinge, D. 2008. Gene expression profiling for the identification of G protein-coupled receptors in human platelets. *Thromb. Res.* 122: 47-57.
- 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.

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.

SOURCE

GPR126 (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular 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-107577 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GPR126 (D-14) 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), 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 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.

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) 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.

RESEARCH USE

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