

GPR115 (T-14): sc-107576

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. GPR115 (G protein-coupled receptor 115), also known as G-protein coupled receptor PGR18, is a 695 amino acid multi-pass membrane protein belonging to the G-protein coupled receptor 2 family and LN-TM7 subfamily. GPR115 functions as an orphan receptor, contains one GPS domain and is encoded by a gene located on human chromosome 6.

REFERENCES

1. Fredriksson, R., Lagerström, M.C., Höglund, P.J. and Schiöth, H.B. 2002. Novel human G protein-coupled receptors with long N-terminals containing GPS domains and Ser/Thr-rich regions. *FEBS Lett.* 531: 407-414.
2. Vassilatis, D.K., Hohmann, J.G., Zeng, H., Li, F., Ranchalis, J.E., Mortrud, M.T., Brown, A., Rodriguez, S.S., Weller, J.R., Wright, A.C., Bergmann, J.E. and Gaitanaris, G.A. 2003. The G protein-coupled receptor repertoires of human and mouse. *Proc. Natl. Acad. Sci. USA* 100: 4903-4908.
3. 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.
4. Bjarnadóttir, T.K., Fredriksson, R. and Schiöth, H.B. 2007. The adhesion GPCRs: a unique family of G protein-coupled receptors with important roles in both central and peripheral tissues. *Cell. Mol. Life Sci.* 64: 2104-2119.
5. Haitina, T., Olsson, F., Stephansson, O., Alsiö, J., Roman, E., Ebendal, T., Schiöth, H.B. and Fredriksson, R. 2008. Expression profile of the entire family of Adhesion G protein-coupled receptors in mouse and rat. *BMC Neurosci.* 9: 43.
6. Yona, S., Lin, H.H., Siu, W.O., Gordon, S. and Stacey, M. 2008. Adhesion-GPCRs: emerging roles for novel receptors. *Trends Biochem. Sci.* 33: 491-500.

CHROMOSOMAL LOCATION

Genetic locus: GPR115 (human) mapping to 6p12.3; Gpr115 (mouse) mapping to 17 B3.

SOURCE

GPR115 (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of GPR115 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-107576 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GPR115 (T-14) is recommended for detection of GPR115 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 GPR family members.

GPR115 (T-14) is also recommended for detection of GPR115 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GPR115 siRNA (h): sc-95566, GPR115 siRNA (m): sc-145698, GPR115 shRNA Plasmid (h): sc-95566-SH, GPR115 shRNA Plasmid (m): sc-145698-SH, GPR115 shRNA (h) Lentiviral Particles: sc-95566-V and GPR115 shRNA (m) Lentiviral Particles: sc-145698-V.

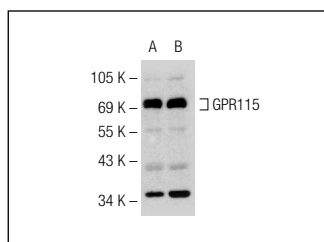
Molecular Weight of GPR115: 78 kDa.

Positive Controls: HISM cell lysate: sc-2229 or CCD-1064Sk cell lysate: sc-2263.

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



GPR115 (T-14): sc-107576. Western blot analysis of GPR115 expression in HISM (A) and CCD-1064Sk (B) whole cell lysates.

STORAGE

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

RESEARCH USE

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