

GPR92 (E-15): sc-68984

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. GPR92 (G protein-coupled receptor 92), also known as LPA5 (lysophosphatidic acid receptor 5) or GPR93, is a 372 amino acid multi-pass membrane protein that belongs to the G protein-coupled receptor family. Expressed in a variety of tissues, but not present in basal forebrain, thalamus or hippocampus, GPR92 functions as a receptor for lysophosphatidic acid (LPA) and may, therefore, play an important role in mediating diverse cellular activities.

REFERENCES

1. Lee, D.K., et al. 2001. Discovery and mapping of ten novel G protein-coupled receptor genes. *Gene* 275: 83-91.
2. Lee, C.W., et al. 2006. GPR92 as a new G_{12/13}- and G_q-coupled lysophosphatidic acid receptor that increases cAMP, LPA5. *J. Biol. Chem.* 281: 23589-23597.
3. Kotarsky, K., et al. 2006. Lysophosphatidic acid binds to and activates GPR92, a G protein-coupled receptor highly expressed in gastrointestinal lymphocytes. *J. Pharmacol. Exp. Ther.* 318: 619-628.
4. Oh, da Y., et al. 2008. Identification of farnesyl pyrophosphate and N-arachidonylglycine as endogenous ligands for GPR92. *J. Biol. Chem.* 283: 21054-21064.
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™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 606926. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: LPA5 (human) mapping to 12p13.31; Lpar5 (mouse) mapping to 6 F2.

SOURCE

GPR92 (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of GPR92 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-68984 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.

APPLICATIONS

GPR92 (E-15) is recommended for detection of GPR92 of mouse 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), 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).

GPR92 (E-15) is also recommended for detection of GPR92 in additional species, including bovine.

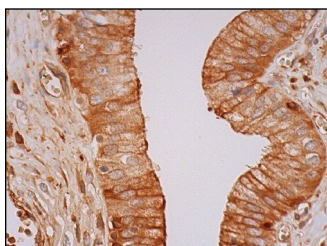
Suitable for use as control antibody for GPR92 siRNA (h): sc-75194, GPR92 siRNA (m): sc-75195, GPR92 shRNA Plasmid (h): sc-75194-SH, GPR92 shRNA Plasmid (m): sc-75195-SH, GPR92 shRNA (h) Lentiviral Particles: sc-75194-V and GPR92 shRNA (m) Lentiviral Particles: sc-75195-V.

Molecular Weight of GPR92: 41 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



GPR92 (E-15): sc-68984. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing membrane and cytoplasmic staining of glandular cells.

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.