

GPR92 (H-67): sc-135237

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 LPAR5 (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

- Lee, D.K., et al. 2001. Discovery and mapping of ten novel G protein-coupled receptor genes. *Gene* 275: 83-91.
- 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.
- 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.
- Oh, D.A., et al. 2008. Identification of farnesyl pyrophosphate and N-arachidonylglycine as endogenous ligands for GPR92. *J. Biol. Chem.* 283: 21054-21064.
- Amisten, S., et al. 2008. Gene expression profiling for the identification of G protein-coupled receptors in human platelets. *Thromb. Res.* 122: 47-57.
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CHROMOSOMAL LOCATION

Genetic locus: LPAR5 (human) mapping to 12p13.31; Lpar5 (mouse) mapping to 6 F2.

SOURCE

GPR92 (H-67) is a rabbit polyclonal antibody raised against amino acids 3-69 mapping near the N-terminus 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.

STORAGE

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

APPLICATIONS

GPR92 (H-67) is recommended for detection of GPR92 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).

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.

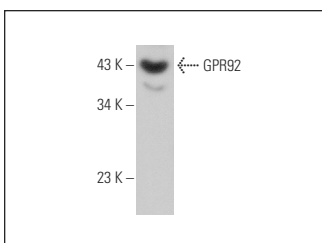
Molecular Weight of GPR92: 41 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

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.

DATA



GPR92 (H-67): sc-135237. Western blot analysis of GPR92 expression in K-562 whole cell lysate.

SELECT PRODUCT CITATIONS

- Haid, D.C., et al. 2012. Receptors responsive to protein breakdown products in γ -cells and δ -cells of mouse, swine and human. *Front. Physiol.* 3: 65.

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.