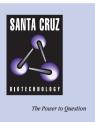
SANTA CRUZ BIOTECHNOLOGY, INC.

GPR92 (C-18): sc-68983



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., 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.
- 2. Lee, C.W., Rivera, R., Gardell, S., Dubin, A.E. and Chun, J. 2006. GPR92 as a new G12/13- and Gq-coupled lysophosphatidic acid receptor that increases cAMP, LPA5. J. Biol. Chem. 281: 23589-23597.
- Kotarsky, K., Boketoft, A., Bristulf, J., Nilsson, N.E., Norberg, A., Hansson, S., Owman, C., Sillard, R., Leeb-Lundberg, L.M. and Olde, B. 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., Yoon, J.M., Moon, M.J., Hwang, J.I., Choe, H., Lee, J.Y., Kim, J.I., Kim, S., Rhim, H., O'Dell, D.K., Walker, J.M., Na, H.S., Lee, M.G., Kwon, H.B., Kim, K. and Seong, J.Y. 2008. Identification of farnesyl pyrophosphate and N-arachidonylglycine as endogenous ligands for GPR92. J. Biol. Chem. 283: 21054-21064.
- 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.
- 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: LPAR5 (human) mapping to 12p13.31.

SOURCE

GPR92 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of GPR92 of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-68983 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GPR92 (C-18) is recommended for detection of GPR92 of 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 GPR92 siRNA (h): sc-75194, GPR92 shRNA Plasmid (h): sc-75194-SH and GPR92 shRNA (h) Lentiviral Particles: sc-75194-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) Immunofluo-rescence: use 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.