

# GPR149 (L-16): sc-99910

## 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. GPR149 (G protein-coupled receptor 149), also known as PGR10 or IEDA, is a 731 amino acid multi-pass membrane protein that functions as an orphan receptor and belongs to the G protein-coupled receptor family. The gene encoding GPR149 maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci.

## REFERENCES

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- Raming, K., et al. 1998. Identification of a novel G-protein coupled receptor expressed in distinct brain regions and a defined olfactory zone. *Recept. Channels* 6: 141-151.
- Schöneberg, T., et al. 1999. Structural basis of G protein-coupled receptor function. *Mol. Cell. Endocrinol.* 151: 181-193.
- Schwalbe, H., et al. 2002. Dissecting G-protein-coupled receptors: structure, function, and ligand interaction. *ChemBiochem.* 3: 915-919.
- Small, K.M., et al. 2002. False positive non-synonymous polymorphisms of G-protein coupled receptor genes. *FEBS Lett.* 516: 253-256.
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## CHROMOSOMAL LOCATION

Genetic locus: GPR149 (human) mapping to 3q25.2; Gpr149 (mouse) mapping to 3 E1.

## SOURCE

GPR149 (L-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of GPR149 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-99910 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

GPR149 (L-16) is recommended for detection of GPR149 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.

GPR149 (L-16) is also recommended for detection of GPR149 in additional species, including porcine.

Suitable for use as control antibody for GPR149 siRNA (h): sc-78409, GPR149 siRNA (m): sc-145708, GPR149 shRNA Plasmid (h): sc-78409-SH, GPR149 shRNA Plasmid (m): sc-145708-SH, GPR149 shRNA (h) Lentiviral Particles: sc-78409-V and GPR149 shRNA (m) Lentiviral Particles: sc-145708-V.

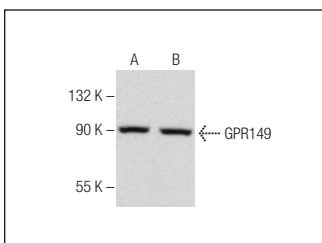
Molecular Weight of GPR149: 81 kDa.

Positive Controls: Mouse brain extract: sc-2253 or mouse cerebellum extract: sc-2403.

## 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



GPR149 (L-16): sc-99910. Western blot analysis of GPR149 expression in mouse brain (A) and mouse cerebellum (B) tissue extracts.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.