

# GPR83 (C-14): sc-74646

## 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. GPR83 (G protein-coupled receptor 83), also known as GIR or GPR72, is a 423 amino acid multi-pass membrane protein that belongs to the G protein-coupled receptor 1 family. Expressed specifically in brain tissue, GPR83 functions as an orphan receptor that is thought to play a role in signaling events throughout the cell. Human GPR83 shares 85% amino acid identity with its rodent counterpart, suggesting a conserved role between species.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: GPR83 (human) mapping to 11q21; Gpr83 (mouse) mapping to 9 A2.

## 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.

## SOURCE

GPR83 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of GPR83 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-74646 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

GPR83 (C-14) is recommended for detection of GPR83 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

GPR83 (C-14) is also recommended for detection of GPR83 in additional species, including canine and porcine.

Suitable for use as control antibody for GPR83 siRNA (h): sc-75190, GPR83 siRNA (m): sc-75191, GPR83 shRNA Plasmid (h): sc-75190-SH, GPR83 shRNA Plasmid (m): sc-75191-SH, GPR83 shRNA (h) Lentiviral Particles: sc-75190-V and GPR83 shRNA (m) Lentiviral Particles: sc-75191-V.

Molecular Weight of GPR83: 48 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

## PROTOCOLS

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