

GPR80 (S-15): sc-84288

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. GPR signaling is an evolutionarily ancient mechanism used by all eukaryotes to sense environmental stimuli and mediate cell-cell communication. 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. GPR80, also designated GPR99, is a 337 amino acid protein that was originally characterized as a P2Y₁₅ receptor and thought to be activated by AMP and adenosine. GPR80 is actually a receptor for α -ketoglutarate and appears to act exclusively through a G(q)-mediated pathway. It is expressed in kidney and placenta.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: OXGR1 (human) mapping to 13q32.1; Oxgr1 (mouse) mapping to 14 E4.

SOURCE

GPR80 (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of GPR80 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 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84288 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GPR80 (S-15) is recommended for detection of GPR80 of mouse, rat 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); non cross-reactive with other GPR family members.

GPR80 (S-15) is also recommended for detection of GPR80 in additional species, including canine and porcine.

Suitable for use as control antibody for GPR80 siRNA (h): sc-75189, GPR80 siRNA (m): sc-145739, GPR80 shRNA Plasmid (h): sc-75189-SH, GPR80 shRNA Plasmid (m): sc-145739-SH, GPR80 shRNA (h) Lentiviral Particles: sc-75189-V and GPR80 shRNA (m) Lentiviral Particles: sc-145739-V.

Molecular Weight of GPR80: 38 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.

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.