BACKGROUND

G protein-coupled receptors (GPRs or GPCRs), also known as seven transmembrane receptors, heptahelical receptors or 7TM receptors, are members of the largest protein family and play a role in many different stimulus-response pathways. G protein-coupled receptors mediate extracellular signals into intracellular signals (G protein activation). They respond to a wide variety of signaling molecules, including hormones, neurotransmitters and other proteins and peptides. GPR proteins are usually integral seven pass membrane proteins with some conserved amino acid regions. GPR108 (G protein-coupled receptor 108), also known as LUSTR2 (lung seven transmembrane receptor 2), is a 543 amino acid multi-pass membrane protein that belongs to the LUT7M family. The gene encoding GPR108 maps to human chromosome 19p13.3 and mouse chromosome 17 D.

REFERENCES

7. Edgar, A.J. 2007. Human GPR107 and murine Gpr108 are members of the LUSTR family of proteins found in both plants and animals, having similar topology to G protein-coupled receptors. DNA Seq. 18: 235-241.

CHROMOSOMAL LOCATION

Genetic locus: GPR108 (human) mapping to 19p13.3; Gpr108 (mouse) mapping to 17 D.

SOURCE

GPR108 (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GPR108 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 IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-247055 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GPR108 (E-15) is recommended for detection of GPR108 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.

GPR108 (E-15) is also recommended for detection of GPR108 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for GPR108 siRNA (m): sc-145692, GPR108 shRNA Plasmid (m): sc-145692-SH and GPR108 shRNA (m) Lentiviral Particles: sc-145692-V.

Molecular Weight of GPR108: 61 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.