

GPR125 (P-15): sc-164512

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. GPR125 (G protein-coupled receptor 125), also known as PGR21 or TEM5L, is a 1,321 amino acid multi-pass membrane protein belonging to the G protein-coupled receptor 2 family and the LN-TM7 subfamily. Considered a novel orphan adhesion-type G-protein-coupled receptor, GPR125 has five leucine rich repeats (LRR), an immunoglobulin (Ig) domain and a GPS domain. GPR125 may play a functional role in choroidal and hippocampal response to brain injury. It is also suggested that GPR125 may be a marker for spermatogonial stem cells. Four isoforms of GPR125 exists due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GPR125 (human) mapping to 4p15.2; Gpr125 (mouse) mapping to 5 B3.

SOURCE

GPR125 (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of GPR125 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-164512 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GPR125 (P-15) is recommended for detection of GPR125 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.

GPR125 (P-15) is also recommended for detection of GPR125 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for GPR125 siRNA (h): sc-89088, GPR125 siRNA (m): sc-108260, GPR125 shRNA Plasmid (h): sc-89088-SH, GPR125 shRNA Plasmid (m): sc-108260-SH, GPR125 shRNA (h) Lentiviral Particles: sc-89088-V and GPR125 shRNA (m) Lentiviral Particles: sc-108260-V.

Molecular Weight of GPR125: 146 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.

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.

PROTOCOLS

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