SANTA CRUZ BIOTECHNOLOGY, INC.

GPR82 (S-14): sc-131532

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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. GPR82 is a 336 amino acid multi-pass membrane protein that functions as an orphan receptor and belongs to the GPR1 family. The gene encoding GPR82 maps to human chromosome X, which consists of about 153 million base pairs and nearly 1,000 genes. Color blindness, hemophilia and Duchenne muscular dystrophy are well known X chromosome-linked conditions which affect males more frequently, as males carry a single X chromosome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GPR82 (human) mapping to Xp11.4; Gpr82 (mouse) mapping to X A1.1.

SOURCE

GPR82 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of GPR82 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-131532 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GPR82 (S-14) is recommended for detection of GPR82 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.

GPR82 (S-14) is also recommended for detection of GPR82 in additional species, including canine.

Suitable for use as control antibody for GPR82 siRNA (h): sc-91040, GPR82 siRNA (m): sc-145740, GPR82 shRNA Plasmid (h): sc-91040-SH, GPR82 shRNA Plasmid (m): sc-145740-SH, GPR82 shRNA (h) Lentiviral Particles: sc-91040-V and GPR82 shRNA (m) Lentiviral Particles: sc-145740-V.

Molecular Weight of GPR82: 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.

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.