SANTA CRUZ BIOTECHNOLOGY, INC.

PSGR (T-12): sc-69543

BACKGROUND

Olfactory receptors are G protein-coupled receptors that localize to the cilia of olfactory sensory neurons where they display affinity for and bind to a variety of odor molecules. The genes encoding olfactory receptors comprise the largest family in the human genome. The binding of olfactory receptor proteins to odor molecules triggers a signal transduction that propagates nerve impulses throughout the body, ultimately leading to transmission of the signal to the brain and the subsequent perception of smell. PSGR (prostate-specific G protein-coupled receptor), also known as OR51E2 (olfactory receptor 51E2), is a 320 amino acid multi-pass membrane protein that belongs to the olfactory receptor subfamily of G protein-coupled receptors. Expressed exclusively in prostate tissue and upregulated in prostate cancer, PSGR functions as an odorant receptor that binds odorant molecules and triggers the perception of smell.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: OR51E2 (human) mapping to 11p15.4.

SOURCE

PSGR (T-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of PSGR 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-69543 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PSGR (T-12) is recommended for detection of PSGR of 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).

PSGR (T-12) is also recommended for detection of PSGR in additional species, including equine and bovine.

Suitable for use as control antibody for PSGR siRNA (h): sc-76265, PSGR shRNA Plasmid (h): sc-76265-SH and PSGR shRNA (h) Lentiviral Particles: sc-76265-V.

Molecular Weight of PSGR: 36 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.