

OR6C70 (S-12): sc-132761

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. OR6C70 (olfactory receptor 6C70) is a 312 amino acid multi-pass membrane protein that functions as an odorant receptor and, like other members of the olfactory receptor family, binds specific odor molecules and participates in propagating the olfactory response.

REFERENCES

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2. Glusman, G., et al. 2000. The olfactory receptor gene superfamily: data mining, classification, and nomenclature. *Mamm. Genome* 11: 1016-1023.
3. Hoppe, R., et al. 2003. Organization and evolutionary relatedness of OR37 olfactory receptor genes in mouse and human. *Genomics* 82: 355-364.
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5. Buck, L.B. 2004. Olfactory receptors and odor coding in mammals. *Nutr. Rev.* 62: S184-S188; discussion S224-S241.
6. Malnic, B., et al. 2004. The human olfactory receptor gene family. *Proc. Natl. Acad. Sci. USA* 101: 2584-2589.
7. Khafizov, K., et al. 2007. Ligand specificity of odorant receptors. *J. Mol. Model.* 13: 401-409.
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CHROMOSOMAL LOCATION

Genetic locus: OR6C70 (human) mapping to 12q13.2.

SOURCE

OR6C70 (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal extracellular domain of OR6C70 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-132761 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

OR6C70 (S-12) is recommended for detection of OR6C70 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).

Suitable for use as control antibody for OR6C70 siRNA (h): sc-95740, OR6C70 shRNA Plasmid (h): sc-95740-SH and OR6C70 shRNA (h) Lentiviral Particles: sc-95740-V.

Molecular Weight of OR6C70: 35 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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.