SANTA CRUZ BIOTECHNOLOGY, INC.

OR1L6 (C-12): sc-133344

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. OR1L6 (olfactory receptor 1L6), also known as olfactory receptor OR9-30 or olfactory receptor 1L7 (OR1L7), is a 347 amino acid multi-pass membrane protein that functions as an odorant receptor and belongs to the G-protein coupled receptor 1 family.

REFERENCES

1. Sullivan, S.L., et al. 1994. Odorant receptor diversity and patterned gene expression in the mammalian olfactory epithelium. Prog. Clin. Biol. Res. 390: 75-84.
2. Fuchs, T., et al. 2002. DEFOG: a practical scheme for deciphering families of genes. Genomics 80: 295-302.
3. Volz, A., et al. 2003. Complex transcription and splicing of odorant receptor genes. J. Biol. Chem. 278: 19691-19701.
4. Gaillard, I., et al. 2004. Olfactory receptors. Cell. Mol. Life Sci. 61: 456-469.
5. Hatt, H. 2004. Molecular and cellular basis of human olfaction. Chem. Biodivers. 1: 1857-1869.
6. Malnic, B., et al. 2004. The human olfactory receptor gene family. Proc. Natl. Acad. Sci. USA 101: 2584-2589.
7. Kato, A. and Touhara, K. 2009. Mammalian olfactory receptors: pharmacology, G protein coupling and desensitization. Cell. Mol. Life Sci. 66: 3743-3753.
8. Thompson, E.E., et al. 2010. Sequence variations at the human leukocyte antigen-linked olfactory receptor cluster do not influence female preferences for male odors. Hum. Immunol. 71: 100-103.

CHROMOSOMAL LOCATION

Genetic locus: OR1L6 (human) mapping to 9q33.2.

SOURCE

OR1L6 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of OR1L6 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.

PROTOCOLS

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

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-133344 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

OR1L6 (C-12) is recommended for detection of OR1L6 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); may cross-react with family member OR1L4.

Suitable for use as control antibody for OR1L6 siRNA (h): sc-92789, OR1L6 shRNA Plasmid (h): sc-92789-SH and OR1L6 shRNA (h) Lentiviral Particles: sc-92789-V.

Molecular Weight of OR1L6: 40 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.