SANTA CRUZ BIOTECHNOLOGY, INC.

OR10J1 (Y-13): sc-103956

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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. OR10J1 (olfactory receptor, family 10, subfamily J, member 1), also known as olfactory receptor OR1-26, is a 320 amino acid multi-pass membrane protein encoded by a gene that maps to human chromosome 1q23.2.

REFERENCES

1. Parmentier, M., et al. 1992. Expression of members of the putative olfactory receptor gene family in mammalian germ cells. Nature 35: 453-455.
2. 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.
3. Lane, R.P., et al. 2001. Genomic analysis of orthologous mouse and human olfactory receptor loci. Proc. Natl. Acad. Sci. USA 98: 7390-7395.
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., et al. 2009. Mammalian olfactory receptors: pharmacology, G protein coupling and desensitization. Cell. Mol. Life Sci. 66: 3743-3753.

CHROMOSOMAL LOCATION

Genetic locus: OR10J1 (human) mapping to 1q23.2.

SOURCE

OR10J1 (Y-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of OR10J1 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-103956 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.

PROTOCOLS

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

APPLICATIONS

OR10J1 (Y-13) is recommended for detection of OR10J1 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 OR10J5.

Suitable for use as control antibody for OR10J1 siRNA (h): sc-78655, OR10J1 shRNA Plasmid (h): sc-78655-SH and OR10J1 shRNA (h) Lentiviral Particles: sc-78655-V.

Molecular Weight of OR10J1: 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.

RESEARCH USE

For research use only, not for use in diagnostic procedures.