# SANTA CRUZ BIOTECHNOLOGY, INC.

# OR4C6 (D-13): sc-109645



#### 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. OR4C6 (olfactory receptor 4C6) is a 309 amino acid protein. The gene encoding OR4C6 maps to human chromosome 11.

### REFERENCES

- Malnic, B., Hirono, J., Sato, T. and Buck, L.B. 1999. Combinatorial receptor codes for odors. Cell 96: 713-723.
- Glusman, G., Bahar, A., Sharon, D., Pilpel, Y., White, J. and Lancet, D. 2000. The olfactory receptor gene superfamily: data mining, classification, and nomenclature. Mamm. Genome 11: 1016-1023.
- Gaillard, I., Rouquier, S. and Giorgi, D. 2004. Olfactory receptors. Cell. Mol. Life Sci. 61: 456-469.
- Buck, L.B. 2004. Olfactory receptors and odor coding in mammals. Nutr. Rev. 62: S184-188.
- Malnic, B., Godfrey, P.A. and Buck, L.B. 2004. The human olfactory receptor gene family. Proc. Natl. Acad. Sci. USA 101: 2584-2589.
- Khafizov, K., Anselmi, C., Menini, A. and Carloni, P. 2007. Ligand specificity of odorant receptors. J. Mol. Model. 13: 401-409.
- 7. Rinaldi, A. 2007. The scent of life. The exquisite complexity of the sense of smell in animals and humans. EMBO Rep. 8: 629-633.

## CHROMOSOMAL LOCATION

Genetic locus: OR4C6 (human) mapping to 11q11.

## SOURCE

OR4C6 (D-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of OR4C6 of human origin.

### PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-109645 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4° C, \*\*D0 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**

OR4C6 (D-13) is recommended for detection of OR4C6 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); non cross-reactive with other OR4C family members.

Suitable for use as control antibody for OR4C6 siRNA (h): sc-96403, OR4C6 shRNA Plasmid (h): sc-96403-SH and OR4C6 shRNA (h) Lentiviral Particles: sc-96403-V.

## **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluo-rescence: 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<sup>™</sup> Mounting Medium: sc-24941.

### **RESEARCH USE**

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