SANTA CRUZ BIOTECHNOLOGY, INC.

OR2C3 (T-14): sc-104524



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. OR2C3 (olfactory receptor 2C3) is a 320 amino acid protein. The gene encoding OR2C3 maps to human chromosome 1.

REFERENCES

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- 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-S188; discussion S224-S241.
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- 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: OR2C3 (human) mapping to 1q44.

SOURCE

OR2C3 (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of OR2C3 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-104524 P, (100 μ 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

OR2C3 (T-14) is recommended for detection of OR2C3 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 OR2G3, OR6X1, OR13C3 or OR13D1.

OR2C3 (T-14) is also recommended for detection of OR2C3 in additional species, including equine, canine, bovine and porcine.

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) Immunofluo-rescence: use 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.