OR8H1/2/3 (T-12): sc-131734

SANTA CRUZ®

BIOTECHNOLOGY

The Power to Question

BACKGROUND

Olfactory receptors are G protein-coupled receptor proteins 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 cascade that leads to the production of cAMP via an olfactory-enriched adenylate cyclase. This event ultimately leads to transmission of action potentials to the brain and the subsequent perception of smell. OR8H1, OR8H2 and OR8H3 are multi-pass membrane proteins that function as odorant receptors, effectively binding odor molecules and initiating the propagation of signals to the primary olfactory cortex. The genes encoding these proteins map to human chromosome 11, which contains 135 million base pairs and 1,400 genes, making up around 4% of human genomic DNA.

REFERENCES

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7. Touhara, K. 2002. Odor discrimination by G protein-coupled olfactory receptors. Microsc. Res. Tech. 58: 135-141.

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CHROMOSOMAL LOCATION

Genetic locus: OR8H1/OR8H2/OR8H3 (human) mapping to 11q12.1.

SOURCE

OR8H1/2/3 (T-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of OR8H1 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.

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-131734 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

OR8H1/2/3 (T-12) is recommended for detection of OR8H1, OR8H2 and OR8H3 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 OR8 family members.

Molecular Weight of OR8H1/2/3: 35 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.

PROTOCOLS

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