# SANTA CRUZ BIOTECHNOLOGY, INC.

# OR2S2 (D-11): sc-131236



#### BACKGROUND

Olfactory receptors interact with odorant molecules in the nose to initiate a neuronal response that leads to the perception of smell. While they share a seven transmembrane domain structure with many neurotransmitter and hormone receptors, olfactory receptors are responsible for the recognition and transduction of odorant signals. The olfactory receptor gene family is the largest in the genome. OR2S2 (olfactory receptor 2S20), also known as OR9-3, is a 319 amino acid multi-pass membrane protein that belongs to the G-protein coupled receptor 1 family. The gene that encodes OR2S2 consists of nearly 1,000 bases and maps to human chromosome 9p13.3. Housing over 900 genes, chromosome 9 comprises nearly 4% of the human genome. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, and familial dysautonomia, are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

#### REFERENCES

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#### CHROMOSOMAL LOCATION

Genetic locus: OR2S2 (human) mapping to 9p13.3.

# SOURCE

OR2S2 (D-11) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of OR2S2 of human origin.

## **RESEARCH USE**

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

### PRODUCT

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

Blocking peptide available for competition studies, sc-131236 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

OR2S2 (D-11) is recommended for detection of OR2S2 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 OR2 family members.

Suitable for use as control antibody for OR2S2 siRNA (h): sc-92505, OR2S2 shRNA Plasmid (h): sc-92505-SH and OR2S2 shRNA (h) Lentiviral Particles: sc-92505-V.

Molecular Weight of OR2S2: 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) 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™ Mounting Medium: sc-24941.

## 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.