## SANTA CRUZ BIOTECHNOLOGY, INC.

# OR51F2 (Q-11): sc-131677



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. OR51F2 (olfactory receptor 51F2), also known as OR11-23, is a 342 amino acid multi-pass membrane protein that belongs to the G-protein coupled receptor 1 family. The gene that encodes OR51F2 consists of nearly 1,000 bases and maps to human chromosome 11p15.4. Chromosome 11 houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that map to chromosome 11.

#### REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: OR51F2 (human) mapping to 11p15.4.

#### SOURCE

OR51F2 (Q-11) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of OR51F2 of human origin.

#### 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-131677 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

OR51F2 (Q-11) is recommended for detection of OR51F2 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 OR51 family members.

OR51F2 (Q-11) is also recommended for detection of OR51F2 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for OR51F2 siRNA (h): sc-96914, OR51F2 shRNA Plasmid (h): sc-96914-SH and OR51F2 shRNA (h) Lentiviral Particles: sc-96914-V.

Molecular Weight of OR51F2: 39 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.

## **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.