

OR6B2/3 (Y-13): sc-131714

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. While OR6B2 contains 312 amino acids and OR6B3 contains 331 amino acids, both OR6B2 and OR6B3 are multi-pass membrane proteins that belong to the G-protein coupled receptor 1 family. The genes that encode OR6B2 and OR6B3 both map to human chromosome 2q37.3. Consisting of 237 million bases and encoding over 1,400 genes, chromosome 2 makes up approximately 8% of the human genome. Chromosomal arm 2q22-23 has been identified as one of fifteen hot spots thought to be involved in head and neck squamous cell carcinoma (HNSCC). In addition, Harlequin ichthyosis, sitosterolemia and Alström syndrome are genetic diseases that have been linked to genes on chromosome 2.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: OR6B2/OR6B3 (human) mapping to 2q37.3.

SOURCE

OR6B2/3 (Y-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of OR6B2 of human origin.

RESEARCH USE

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

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-131714 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

OR6B2/3 (Y-13) is recommended for detection of OR6B2 and OR6B3 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 OR6 family members.

OR6B2/3 (Y-13) is also recommended for detection of OR6B2 and OR6B3 in additional species, including canine, bovine and porcine.

Molecular Weight of OR6B2: 35 kDa.

Molecular Weight of OR6B3: 37 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.

STORAGE

Store at 4° C, ****DO 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.