

OR2B6 (T-13): sc-131230

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. OR2B6 (olfactory receptor 2B6), also known as olfactory receptor OR6-4, olfactory receptor 6-31 (OR6-31), olfactory receptor 5-40 (OR5-40), olfactory receptor 2B5, olfactory receptor 2B1 or Hs6M1-32, is a 313 amino acid multi-pass membrane protein that functions as an odorant receptor and belongs to the G-protein coupled receptor 1 family.

REFERENCES

1. Sharon, D., Glusman, G., Pilpel, Y., Horn-Saban, S. and Lancet, D. 1998. Genome dynamics, evolution, and protein modeling in the olfactory receptor gene superfamily. *Ann. N.Y. Acad. Sci.* 855: 182-193.
2. Rouquier, S., Taviaux, S., Trask, B.J., Brand-Arpon, V., van den Engh, G., Demaille, J. and Giorgi, D. 1998. Distribution of olfactory receptor genes in the human genome. *Nat. Genet.* 18: 243-250.
3. Mombaerts, P. 1999. Odorant receptor genes in humans. *Curr. Opin. Genet. Dev.* 9: 315-320.
4. Mombaerts, P. 2001. The human repertoire of odorant receptor genes and pseudogenes. *Annu. Rev. Genomics Hum. Genet.* 2: 493-510.
5. Young, J.M. and Trask, B.J. 2002. The sense of smell: genomics of vertebrate odorant receptors. *Hum. Mol. Genet.* 11: 1153-1160.
6. Malnic, B., Godfrey, P.A. and Buck, L.B. 2004. The human olfactory receptor gene family. *Proc. Natl. Acad. Sci. USA* 101: 2584-2589.

CHROMOSOMAL LOCATION

Genetic locus: OR2B6 (human) mapping to 6p22.1.

SOURCE

OR2B6 (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of OR2B6 of human origin.

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-131230 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO 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.

APPLICATIONS

OR2B6 (T-13) is recommended for detection of OR2B6 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 OR2B6 siRNA (h): sc-95529, OR2B6 shRNA Plasmid (h): sc-95529-SH and OR2B6 shRNA (h) Lentiviral Particles: sc-95529-V.

Molecular Weight of OR2B6: 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.

PROTOCOLS

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