

Olfr713 (P-12): sc-168839

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. Olfr713 (olfactory receptor 713), also known as P3 or MOR263-1, is a 323 amino acid protein belonging to the G-protein coupled receptor 1 family. The gene encoding Olfr713 maps to mouse chromosome 7 E3.

REFERENCES

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2. Young, J.M., Friedman, C., Williams, E.M., Ross, J.A., Tonnes-Priddy, L. and Trask, B.J. 2002. Different evolutionary processes shaped the mouse and human olfactory receptor gene families. *Hum. Mol. Genet.* 11: 535-546.
3. Zhang, X. and Firestein, S. 2002. The olfactory receptor gene superfamily of the mouse. *Nat. Neurosci.* 5: 124-133.
4. Young, J.M., Shykind, B.M., Lane, R.P., Tonnes-Priddy, L., Ross, J.A., Walker, M., Williams, E.M. and Trask, B.J. 2003. Odorant receptor expressed sequence tags demonstrate olfactory expression of over 400 genes, extensive alternate splicing and unequal expression levels. *Genome Biol.* 4: R71.
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6. Nguyen-Ba-Charvet, K.T., Di Meglio, T., Fouquet, C. and Chédotal, A. 2008. Robos and slits control the pathfinding and targeting of mouse olfactory sensory axons. *J. Neurosci.* 28: 4244-4249.

CHROMOSOMAL LOCATION

Genetic locus: Olfr713 (mouse) mapping to 7 E3.

SOURCE

Olfr713 (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Olfr713 of mouse 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-168839 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.

APPLICATIONS

Olfr713 (P-12) is recommended for detection of Olfr713 of mouse 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); may cross-react with Olfr714 and Pols of mouse origin.

Suitable for use as control antibody for Olfr713 siRNA (m): sc-151075, Olfr713 shRNA Plasmid (m): sc-151075-SH and Olfr713 shRNA (m) Lentiviral Particles: sc-151075-V.

Molecular Weight of Olfr713: 36 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.