

# OR2T1 (N-11): sc-104536

## 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. OR2T1 (olfactory receptor 2T1), also known as OR1-25 or OR1-61, is a 369 amino acid multi-pass membrane protein that belongs to the G-protein coupled receptor 1 family. The gene that encodes OR2T1 consists of nearly 1,000 bases and maps to human chromosome 1q44. Comprising nearly 8% of the human genome, chromosome 1 spans 260 million base pairs, contains over 3,000 genes and houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome.

## REFERENCES

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4. Tayebi, N., et al. 2001. Gaucher disease and parkinsonism: a phenotypic and genotypic characterization. *Mol. Genet. Metab.* 73: 313-321.
5. Plasilova, M., et al. 2004. Exclusion of an extracolonic disease modifier locus on chromosome 1p33-36 in a large Swiss familial adenomatous polyposis kindred. *Eur. J. Hum. Genet.* 12: 365-371.
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7. Betarbet, R., et al. 2008. Fas-associated factor 1 and Parkinson's disease. *Neurobiol. Dis.* 31: 309-315.
8. Holliday, E.G., et al. 2009. Strong evidence for a novel schizophrenia risk locus on chromosome 1p31.1 in homogeneous pedigrees from Tamil Nadu, India. *Am. J. Psychiatry* 166: 206-215.
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## CHROMOSOMAL LOCATION

Genetic locus: OR2T1 (human) mapping to 1q44.

## SOURCE

OR2T1 (N-11) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of OR2T1 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-104536 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

OR2T1 (N-11) is recommended for detection of OR2T1 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 OR2T1 siRNA (h): sc-78725, OR2T1 shRNA Plasmid (h): sc-78725-SH and OR2T1 shRNA (h) Lentiviral Particles: sc-78725-V.

Molecular Weight of OR2T1: 42 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.