

VN2R1P (C-16): sc-100237

BACKGROUND

G-protein-coupled receptors (GPCRs) are receptors for most hormones and neurotransmitters and therefore play a large role in mediating cellular events. The class III GPCR family are metabotropic receptors for glutamate, γ -aminobutyric acid (GABA), calcium, pheromones and certain gustatory stimulants. VN2R1P (Vomer nasal type-2 receptor-like), also known as putative calcium-sensing receptor-like 1) is a 755 amino acid multi-pass membrane protein that belongs to the GPCR class III family. VN2R1P possibly plays a role in olfactory sensation, due to the fact that other members of the C family of GPCRs function in this way. By receiving chemosensory information from a wide spectrum of pheromonal and odorant cues, VN2 proteins may influence critical animal behavior such as reproduction, feeding and social interactions.

REFERENCES

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3. Galvez, T., et al. 2003. How do G-protein-coupled receptors work? The case of metabotropic glutamate and GABA receptors. *Med. Sci.* 19: 559-565.
4. Pin, J.P., et al. 2003. Evolution, structure, and activation mechanism of family 3/C G-protein-coupled receptors. *Pharmacol. Ther.* 98: 325-354.
5. Hashiguchi, Y., et al. 2005. Evolution of vomeronasal-type odorant receptor genes in the zebrafish genome. *Gene* 362: 19-28.
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7. Bräuner-Osborne, H., et al. 2007. Structure, pharmacology and therapeutic prospects of family C G-protein coupled receptors. *Curr. Drug Targets* 8: 169-184.
8. Johnstone, K.A., et al. 2009. Genomic organization and evolution of the vomeronasal type 2 receptor-like (OlfC) gene clusters in Atlantic salmon, *Salmo salar*. *Mol. Biol. Evol.* 26: 1117-1125.

CHROMOSOMAL LOCATION

Genetic locus: VN2R1P (human) mapping to 3q25.31.

SOURCE

VN2R1P (C-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of VN2R1P of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-100237 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

VN2R1P (C-16) is recommended for detection of VN2R1P 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).

Suitable for use as control antibody for VN2R1P siRNA (h): sc-78095, VN2R1P shRNA Plasmid (h): sc-78095-SH and VN2R1P shRNA (h) Lentiviral Particles: sc-78095-V.

Molecular Weight of VN2R1P: 84 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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 or our catalog for detailed protocols and support products.