

# V1RL1 (W-14): sc-55433

## BACKGROUND

Pheromone receptors are an essential part of the olfactory sensory system that play a role in the recognition of and response to chemical communication. V1RL1, also known as VN1R1 (vomeronasal type-1 receptor 1), VNR1911, ZVNH1 or ZVNR1, is a 353 amino acid member of the G protein-coupled receptor family. Localized to the cell membrane and expressed in olfactory mucosa, V1RL1 is a pheromone receptor that functions to mediate hormone response. V1RL1 contains seven transmembrane domains and shares strong homology with its mouse and rat counterparts. In chimpanzee and orangutan, V1RL1 is encoded by a non-functional pseudogene, suggesting that V1RL1 expression may be species specific.

## REFERENCES

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- Young, J.M., Kambere, M., Trask, B.J. and Lane, R.P. 2005. Divergent V1R repertoires in five species: Amplification in rodents, decimation in primates, and a surprisingly small repertoire in dogs. *Genome Res.* 15: 231-240.
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- Mitropoulos, C., Papachatzopoulou, A., Menounos, P.G., Kolonelou, C., Pappa, M., Bertolis, G., Gerou, S. and Patrinos, G.P. 2007. Association study of human VN1R1 pheromone receptor gene alleles and gender. *Genet. Test.* 11: 128-132.

## CHROMOSOMAL LOCATION

Genetic locus: VN1R1 (human) mapping to 19q13.4.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## SOURCE

V1RL1 (W-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of V1RL1 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-55433 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

V1RL1 (W-14) is recommended for detection of V1RL1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2 µg per 100–500 µg of total protein (1 ml of cell lysate)], 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 V1RL1 siRNA (h): sc-63211.

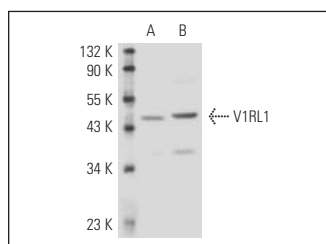
Molecular Weight of V1RL1: 40 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or Caki-1 cell lysate: sc-2224

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



V1RL1 (W-14): sc-55433. Western blot analysis of V1RL1 expression in HeLa (A) and Caki-1 (B) whole cell lysates.

## RESEARCH USE

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