

# V1RA1 (E-14): sc-241729

## BACKGROUND

Vomer nasal organ receptors commonly known as pheromone receptors are an essential part of the olfactory sensory system that play a role in the recognition and response to chemical communication. The three subfamilies of vomeronasal organ receptors include, V1R, V2R and V3R, each of which are comprised of potentially 100 or more family members, including several non-functional pseudogenes. V1RA1 (vomeronasal 1 receptor, A1), also known as V1R, V1r1, VN12, mV1R1 or Vmn1r51, is a 319 amino acid multi-pass membrane protein expressed in a subset of sensory neurons located in the apical layer of the vomeronasal organ. Belonging to the G protein-coupled receptor 1 family, V1RA1 is a pheromone receptor implicated in the regulation of social as well as reproductive behavior. V1RA1 contains seven transmembrane domains.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Vmn1r51 (mouse) mapping to 6 D1.

## SOURCE

V1RA1 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of V1RA1 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-241729 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

V1RA1 (E-14) is recommended for detection of V1RA1 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 V1ra3 and other family members.

Suitable for use as control antibody for V1RA1 siRNA (m): sc-154966, V1RA1 shRNA Plasmid (m): sc-154966-SH and V1RA1 shRNA (m) Lentiviral Particles: sc-154966-V.

Molecular Weight of V1RA1: 37 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.