**BACKGROUND**

Vasopressin (AVP), the antidiuretic hormone, is a cyclic nonpeptide that is involved in the regulation of body fluid osmolality. AVP mediates its effects through a family of G protein-coupled receptors, the vasopressin receptors type V1a, V2 and V3 (also designated V1b). The AVP receptor V1a is responsible for several functions, including blood vessel constriction, liver glycogenolysis and platelet adhesion. It is detected as a full length protein and a shorter protein, which results from proteolytic cleavage of its amino terminus. The V1a receptor is coupled to Gq/11 protein, which increases the intracellular calcium concentration. The human AVP receptor V2 gene maps to chromosome Xq28 and is expressed in lung and kidney. Mutations in the V2 receptor result in nephrogenic diabetes insipidus (NDI), a rare X-linked disorder characterized by the inability of the kidney to concentrate urine in response to AVP. The AVP Receptor V2 activates the Gs protein and the cyclic AMP second messenger system. The AVP receptor V3 is preferentially expressed in the pituitary and stimulates the release of adrenocorticotropin hormone (ACTH) in response to AVP by mobilizing intracellular calcium stores. AVP receptor antagonists may have potential therapeutic effects in hypertension, congestive heart failure, nephrotic syndrome and ACTH-secreting tumors.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: AVPR1A (human) mapping to 12q14.2; Avpr1a (mouse) mapping to 10 D2.

**SOURCE**

AVP Receptor V1a (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of AVP Receptor V1a 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-18096 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.

**RESEARCH USE**

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

**APPLICATIONS**

AVP Receptor V1a (C-20) is recommended for detection of AVP Receptor V1a of mouse, rat and 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).

AVP Receptor V1a (C-20) is also recommended for detection of AVP Receptor V1a in additional species, including equine.

Suitable for use as control antibody for AVP Receptor V1a siRNA (h): sc-29767, AVP Receptor V1a siRNA (m): sc-29768, AVP Receptor V1a shRNA Plasmid (h): sc-29767-SH, AVP Receptor V1a shRNA Plasmid (m): sc-29768-SH, AVP Receptor V1a shRNA (h) Lentiviral Particles: sc-29767-V and AVP Receptor V1a shRNA (m) Lentiviral Particles: sc-29768-V.

Molecular Weight of glycosylated AVP Receptor V1a: 70-80 kDa.

Positive Controls: C2C12 whole cell lysate: sc-364188, NCI-H1668 whole cell lysate or SHP-77 whole cell lysate: sc-364298.

**DATA**

![Western Blot Analysis](image)

**SELECT PRODUCT CITATIONS**


Try AVP Receptor V1a (7G8): sc-134276, our highly recommended monoclonal alternative to AVP Receptor V1a (C-20).