

Product datasheet for **TA329067**

Avpr1a Rabbit Polyclonal Antibody

Product data:

| | |
|------------------------|---|
| Product Type: | Primary Antibodies |
| Applications: | WB |
| Recommended Dilution: | WB: 1:200-1:2000; IHC: 1:100-1:3,000; FC: 1:50-1:600 |
| Reactivity: | Human, Mouse, Rat |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Immunogen: | Peptide (C)KFAKDDSDSMSRR, corresponding to amino acid residues 378-390 of rat Vasopressin V1A receptor (Accession P30560). Intracellular, C-terminus. |
| Formulation: | Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN ₃ . |
| Reconstitution Method: | Add 50 ul double distilled water (DDW) to the lyophilized powder. |
| Purification: | Affinity purified on immobilized antigen. |
| Conjugation: | Unconjugated |
| Storage: | Store at -20°C as received. |
| Stability: | Stable for 12 months from date of receipt. |
| Gene Name: | arginine vasopressin receptor 1A |
| Database Link: | NP_444178 Entrez Gene 552 Human Entrez Gene 54140 Mouse Entrez Gene 25107 Rat P30560 |



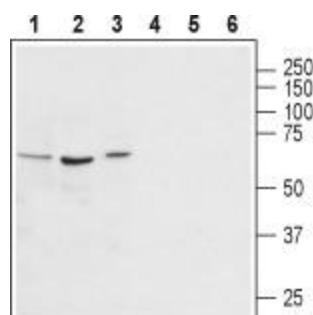
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Background:

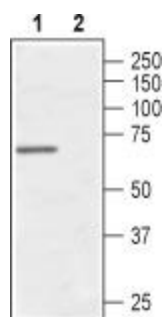
Vasopressin (AVP), the antidiuretic hormone, is a cyclic nonapeptide involved in the homeostasis of body fluid, blood volume, vascular tone, and blood pressure. AVP also belongs to the family of vasoactive and mitogenic peptides involved in physiological and pathological cell growth and differentiation¹. AVP exerts its actions through binding to specific V1A, V1B, and V2, membrane receptors coupled to distinct second messengers². V1 AVP receptor has the typical features of a G-protein coupled transmembrane receptor with seven putative hydrophobic domains, connected by three extracellular and three intracellular loops³. V1 receptors activate phospholipases A2, C, and D, resulting in the production of inositol 1,4,5-trisphosphate (IPS) and 1,2-diacylglycerol (DAG), the mobilization of intracellular Ca²⁺, the influx of extracellular Ca²⁺, the activation of protein kinase C, and protein phosphorylation⁴. V1A AVP receptors have been shown by radioligand binding techniques to be present in vascular smooth muscle cells, hepatocytes, blood platelets, lymphocytes and monocytes, type 2 pneumocytes, adrenal cortex, brain (hippocampus septum et amygdalae), reproductive organs, retinal epithelium, renal mesangial cells, and the A10, A7r5, 3T3, and WRK-1 cell lines⁴. V1A AVP receptors mediate cell contraction and proliferation, platelet aggregation, coagulation factor release, and glycogenolysis. V1B AVP receptors are located in the anterior pituitary where they stimulate ACTH release¹.

Synonyms:

AVPR1; V1aR

Product images:


Western blot analysis of rat kidney (lanes 1 and 4), rat pancreas (lanes 2 and 5) and mouse heart (lanes 3 and 6): 1-3. Anti-Vasopressin V1A Receptor antibody, (1:400). 4-6. Anti-Vasopressin V1A Receptor antibody, preincubated with the control peptide antigen.



Western blot analysis of human Burkitt's lymphoma (Daudi) cell line: 1. Anti-Vasopressin V1A Receptor antibody, (1:400). 2. Anti-Vasopressin V1A Receptor antibody, preincubated with the control peptide antigen.