

Anti-AVPR1A Antibody

Catalog # ABO11558

Specification

Anti-AVPR1A Antibody - Product Information

ApplicationWBPrimary AccessionP30560HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Vasopressin V1a receptor(AVPR1A) detection. Tested with WB in Human; Mouse; Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-AVPR1A Antibody - Additional Information

Gene ID 25107

Other Names Vasopressin V1a receptor, V1aR, AVPR V1a, Antidiuretic hormone receptor 1a, Vascular/hepatic-type arginine vasopressin receptor, Avpr1a

Calculated MW 47655 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Human, Rat, Mouse

Subcellular Localization

Cell membrane; Multi-pass membrane protein. Cytoplasmic vesicle membrane; Multi-pass membrane protein. Located in cytoplasmic vesicles dispersed throughout the cell cytoplasm and to the plasma membrane.

Tissue Specificity

Localized within gonadotropes of the anterior pituitary of the brain. Broadly distributed throughout the cerebral cortex. .

Protein Name Vasopressin V1a receptor

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of rat AVPR1A(155-173aa



HPLKTLQQPARRSRLMIAT), different from the related human and mouse sequences by one amino acid.

Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the G-protein coupled receptor 1 family. Vasopressin/oxytocin receptor subfamily.

Anti-AVPR1A Antibody - Protein Information

Name Avpr1a

Function

Receptor for arginine vasopressin. The activity of this receptor is mediated by G proteins which activate a phosphatidyl- inositol-calcium second messenger system. Involved in social memory formation.

Cellular Location

Cell membrane; Multi-pass membrane protein. Cytoplasmic vesicle membrane; Multi-pass membrane protein. Note=Located in cytoplasmic vesicles dispersed throughout the cell cytoplasm and to the plasma membrane

Tissue Location

Localized within gonadotropes of the anterior pituitary of the brain. Broadly distributed throughout the cerebral cortex.

Anti-AVPR1A Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-AVPR1A Antibody - Images



Anti-AVPR1A antibody, ABO11558, All Western blottingAll lanes: Anti-AVPR1A(ABO11558) at 0.5ug/mlLane 1: Rat Liver Tissue Lysate at 40ugLane 2: Rat Kidney Tissue Lysate at 40ugPredicted bind size: 47KDObserved bind size: 47KD

Anti-AVPR1A Antibody - Background

Arginine vasopressin receptor 1A(officially called AVPR1A) is one of the three major receptor types for arginine vasopressin (AVPR1B and AVPR2Â being the others). It belongs to the subfamily of G-protein coupled receptors which includes AVPR1B, V2R and OXT receptors. This gene is mapped to 12q14.2. AVPR1A is present throughout the brain, as well as in the periphery, in the liver, kidney, and vasculature. The protein encoded by this gene acts as receptor for arginine vasopressin. Its activity is mediated by G proteins which stimulate a phosphatidylinositol-calcium second messenger system. The receptor mediates cell contraction and proliferation, platelet aggregation, release of coagulation factor and glycogenolysis.