

Datasheet for 600-401-Y54

AQUAPORIN 2 Antibody**Overview**

Description:	Anti-Aquaporin 2 (RABBIT) Antibody - 600-401-Y54
Item No.:	600-401-Y54
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Aquaporins are membrane proteins that serve in the transfer of water and small solutes across cellular membranes. One such aquaporin, aquaporin-2 (AQP2) is located in the kidney collecting tubule and plays a critical role in water reabsorption. AQP2 is mainly localized in intracellular vesicles but upon stimulation with anti-diuretic hormone (ADH), AQP2 is translocated to the apical plasma membrane by exocytic fusion of AQP2-bearing vesicles. Mutations in this gene have been linked to autosomal dominant and recessive forms of nephrogenic diabetes insipidus.
Synonyms:	AQP2 Antibody, AQP-CD, WCH-CD, Aquaporin-2, ADH water channel, AQP-2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	AQP2
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-AQP2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 19 amino acid peptide near the C-terminus of human AQP2.

Purity/Specificity: Anti-AQP2 antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. AQP2 antibody is human, mouse and rat reactive. This antibody is predicted to not cross-react with other members of the aquaporin protein family.

Relevant Links:

- [UniProtKB - P41181](#)
- [GeneID - 359](#)
- [NCBI - NP_000477](#)

Application Details

Tested Applications: ELISA, IF, IHC, WB

Application Note: Anti-AQP2 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 29 kDa in Western Blots of specific cell lysates and tissues.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:10,000 - 1:20,000

IF: 20 µg/mL

IHC: 5 µg/mL

WB: 1 - 2 µg/mL

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1.0 mg/ml by UV absorbance at 280 nm

Buffer: 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2

Preservative: 0.02% (w/v) Sodium Azide

Stabilizer: None

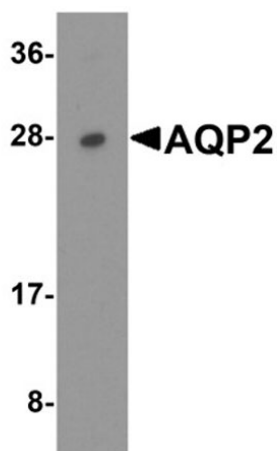
Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration:

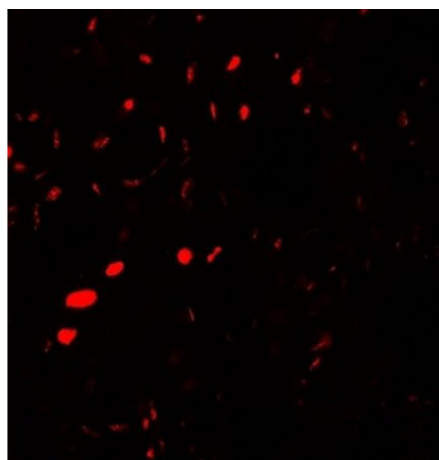
Expiration date is one (1) year from date of receipt.

Images**Western Blot**

Western blot of AQP2.

Load: A431 cell lysate.

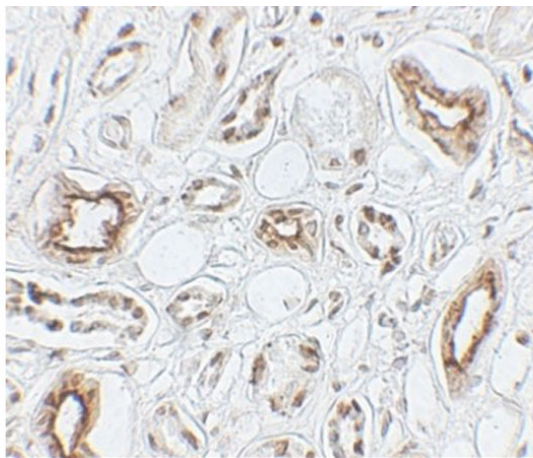
Primary Antibody: AQP2 antibody at 1 µg/ml.

**Immunofluorescence Microscopy**

Immunofluorescence of AQP2.

Tissue: human kidney tissue.

Primary Antibody: AQP2 antibody at 20 µg/mL.

**Immunohistochemistry**

Immunohistochemistry of AQP2.

Tissue: human kidney tissue.

Primary Antibody: AQP2 antibody at 5 µg/mL.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.