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Rabbit Anti-Aquaporine 2 antibody

SL4611R

Product Name:	Aquaporine 2
Chinese Name:	水Channel protein-2抗体
Alias:	ADH water channel; AQP 2; AQP CD; AQP2; AQPCD; Aquaporin 2 collecting duct; Aquaporin CD; Aquaporin2; Aquaporine 2; Collecting duct water channel protein; MGC34501; Water channel protein for renal collecting duct; WCH CD; WCHCD; AQP2_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	30kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human AQP2.:171-271/271<Extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene encodes a water channel protein located in the kidney collecting tubule. It belongs to the MIP/aquaporin family, some members of which are clustered together on chromosome 12q13. Mutations in this gene have been linked to autosomal dominant,

and recessive forms of nephrogenic diabetes insipidus.

Function:
Forms a water-specific channel that provides the plasma membranes of renal collecting duct with high permeability to water, thereby permitting water to move in the direction of an osmotic gradient.

Subcellular Location:
Apical cell membrane; Multi-pass membrane protein. Cytoplasmic vesicle membrane; Multi-pass membrane protein.

Tissue Specificity:
Expressed in renal collecting tubules. Belongs to the MIP/aquaporin (TC 1.A.8) family.

Post-translational modifications:
Ser-256 phosphorylation is necessary and sufficient for expression at the apical membrane. Endocytosis is not phosphorylation-dependent.

DISEASE:
Defects in AQP2 are the cause of diabetes insipidus nephrogenic autosomal (ANDI) [MIM:125800]; also known as diabetes insipidus nephrogenic type 2. ANDI is caused by the inability of the renal collecting ducts to absorb water in response to arginine vasopressin. It is characterized by excessive water drinking (polydypsia), excessive urine excretion (polyuria), persistent hypotonic urine, and hypokalemia. Inheritance can be autosomal dominant or recessive.

Similarity:
Belongs to the MIP/aquaporin (TC 1.A.8) family.

SWISS:
P41181

Gene ID:
359

Database links:

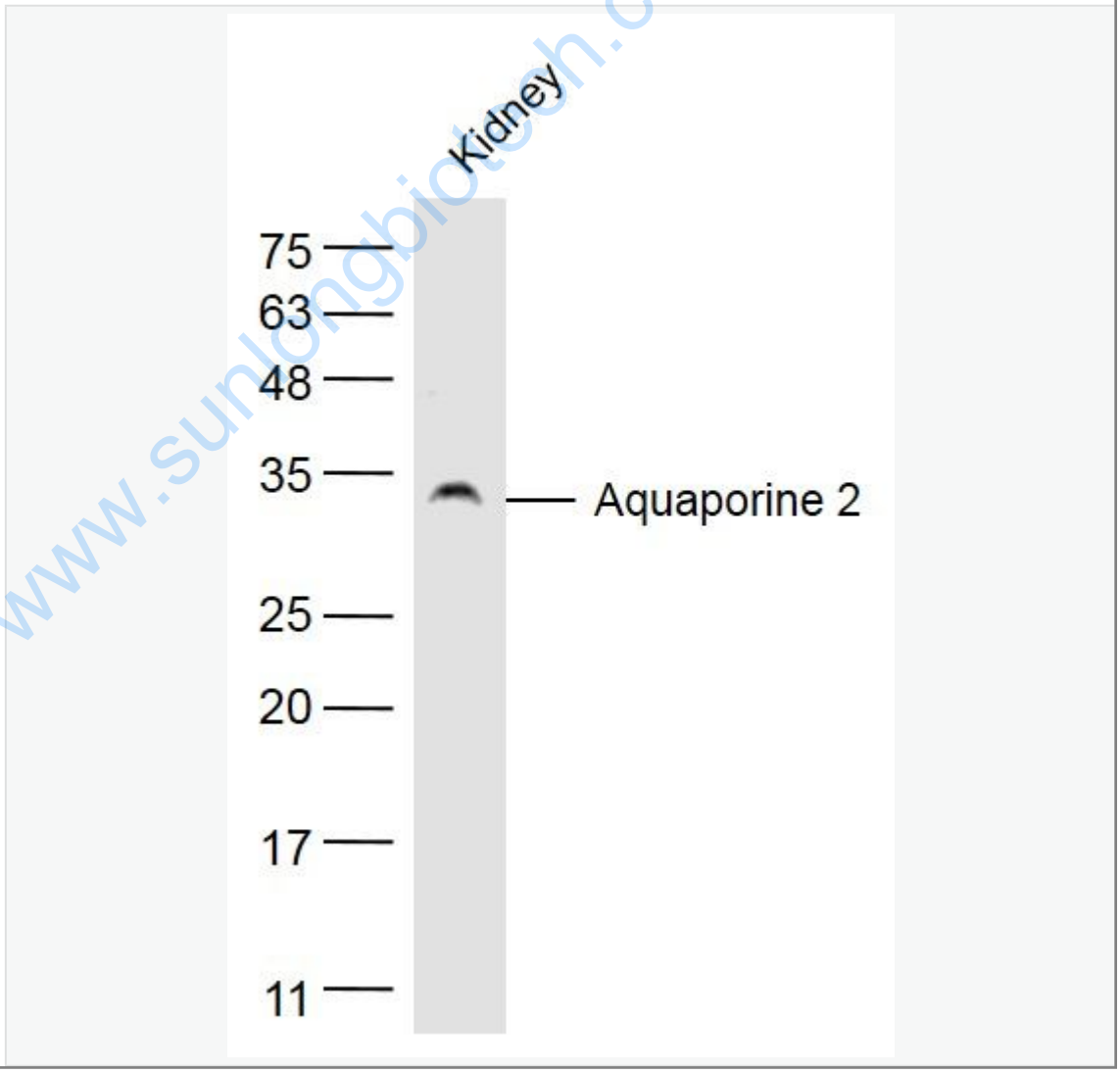
Entrez Gene: 359 Human

Entrez Gene: 11827 Mouse

Entrez Gene: 25386 Rat

Omim: 107777 Human

SwissProt: P41181 Human

	SwissProt: P56402 Mouse SwissProt: P34080 Rat Unigene: 130730 Human Unigene: 20206 Mouse Unigene: 90076 Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	

Sample:

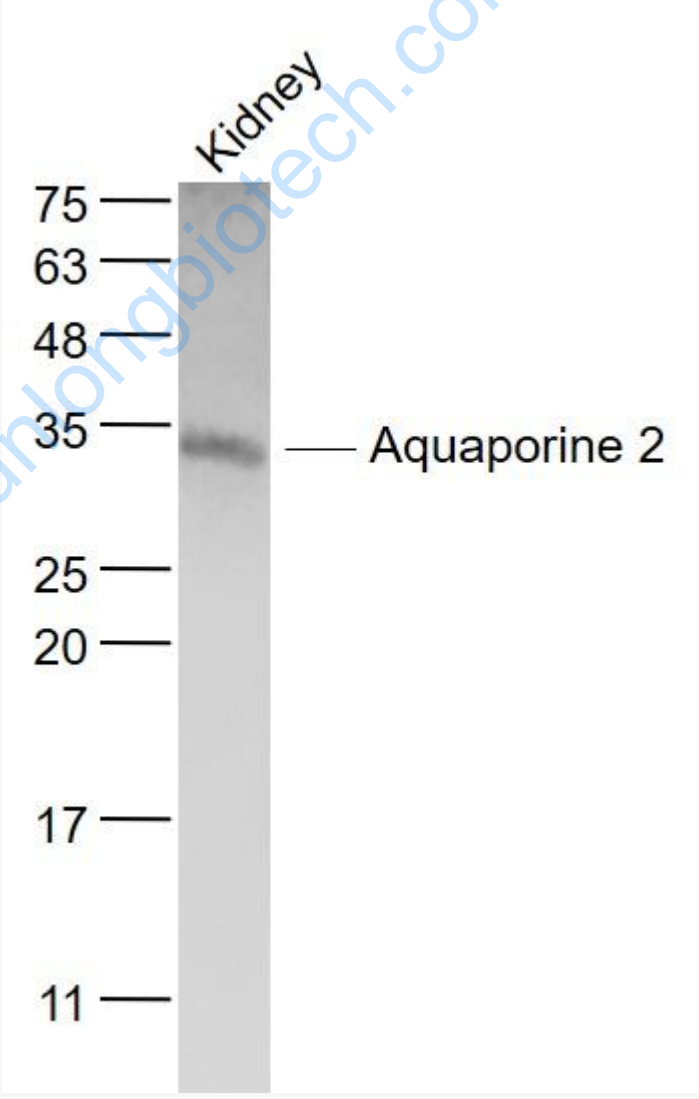
Kidney (Rat) Lysate at 40 ug

Primary: Anti-Aquaporine 2 (SL4611R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 30 kD

Observed band size: 30 kD



Sample:

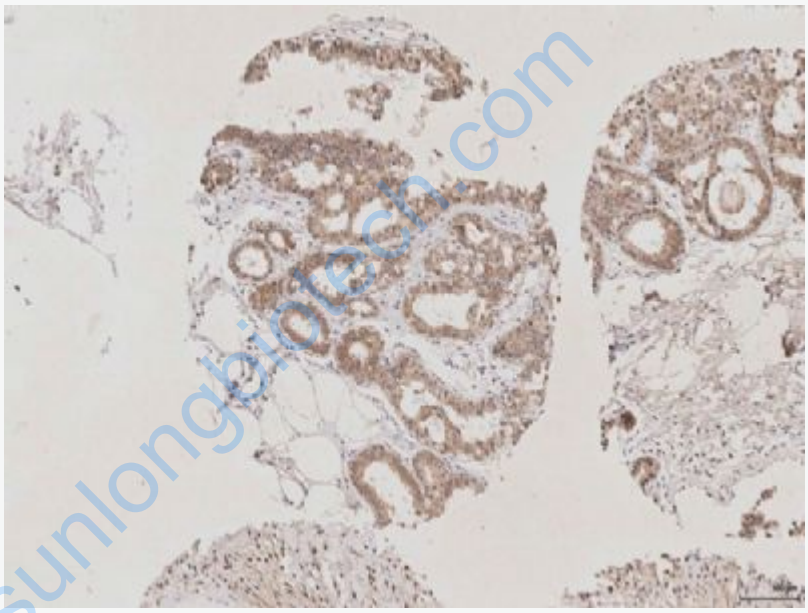
Kidney (Mouse) Lysate at 40 ug

Primary: Anti- Aquaporine 2 (SL4611R) at 1/1000 dilution

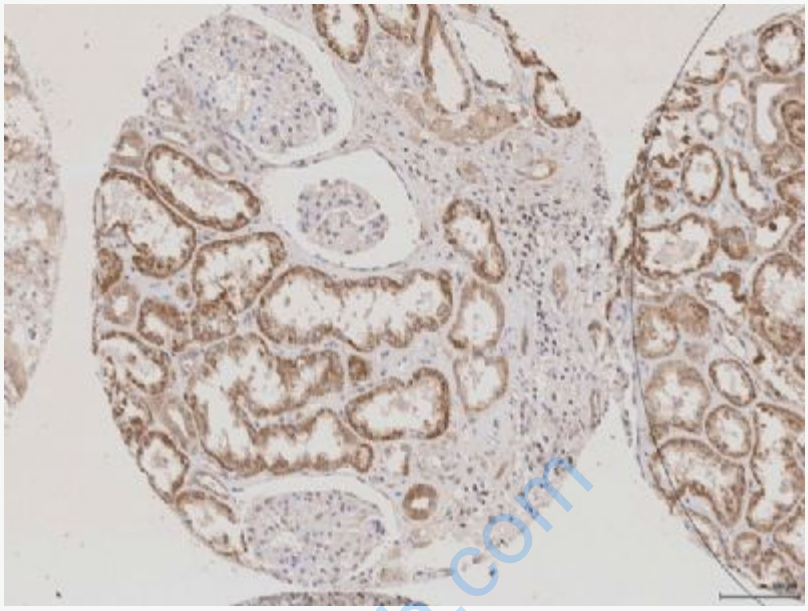
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 30 kD

Observed band size: 32 kD



Independently Validated Antibody, image provided by Science Direct, badge number 029457:Formalin-fixed and paraffin embedded human kidney labeled with Anti-AQP2 Polyclonal Antibody, Unconjugated (SL4611R) at 1:250 followed by conjugation to the secondary antibody and DAB staining



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