

ARG22360 anti-Aquaporin 2 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Aquaporin 2
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Specificity	Detects ~28.8 kDa. May detect larger glycosylated bands ~35-50 kDa.
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Aquaporin 2
Species	Rat
Immunogen	Synthetic peptide around the C-terminus of Rat Aquaporin 2. (N-CLKGLEPDTDWEEREVRRRQ)
Conjugation	Un-conjugated
Alternate Names	Aquaporin-2; Aquaporin-CD; AQP-2; ADH water channel; Collecting duct water channel protein; Water channel protein for renal collecting duct; AQP-CD; WCH-CD

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:400
	IHC-P	1:400
	WB	1:2000

Application Note WB: 0.5 µg/ml of this antibody was sufficient for detection of aquaporin 2 in 10 µg of Rat kidney tissue lysate by colorimetric immunoblot analysis using Goat anti-Rabbit IgG:HRP as the secondary antibody.

* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

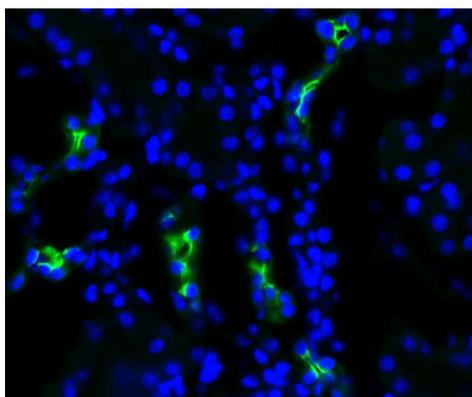
Form	Liquid
Purification	Purification with Protein A and immunogen peptide.
Buffer	PBS, 0.09% Sodium azide and 50% Glycerol.
Preservative	0.09% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to 1-2 weeks. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

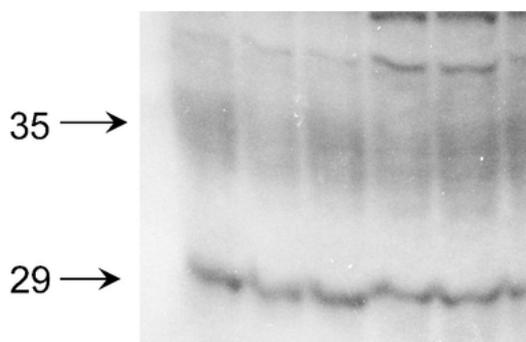
Gene Symbol	Aqp2
Gene Full Name	aquaporin 2
Background	This gene encodes a water channel protein located in the kidney collecting tubule. It belongs to the MIP/aquaporin family, some members of which are clustered together on chromosome 12q13. Mutations in this gene have been linked to autosomal dominant and recessive forms of nephrogenic diabetes insipidus. [provided by RefSeq, Oct 2008]
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. [UniProt]
Calculated Mw	28.8 kDa (unmodified); 35 - 50 kDa (glycosylated)
PTM	Ser-256 phosphorylation is necessary and sufficient for expression at the apical membrane. Endocytosis is not phosphorylation-dependent.
Cellular Localization	Apical cell membrane, Basolateral Cell Membrane, Cell membrane, Cytoplasmic Vesicle, Cytoplasmic vesicle membrane, Golgi apparatus

Images



ARG22360 anti-Aquaporin 2 antibody IHC image

Immunohistochemistry: Rat kidney tissue stained with ARG22360 anti-Aquaporin 2 antibody (green) at 1:200 dilution.



ARG22360 anti-Aquaporin 2 antibody WB image

Western blot: Rat kidney inner medullary homogenates stained with ARG22360 anti-Aquaporin 2 antibody at 1:2000 dilution. Showing glycosylated and non-glycosylated bands.