

ARG41560 anti-Aquaporin 1 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Aquaporin 1
Tested Reactivity	Hu, Ms, Rat
Predict Reactivity	Hm
Tested Application	FACS, IHC-Fr, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Aquaporin 1
Species	Human
Immunogen	Synthetic peptide corresponding to aa. 251-269 of Human Aquaporin 1. (EYDLDADDINSRVEMKPK)
Conjugation	Un-conjugated
Alternate Names	Aquaporin-1; CO; AQP-CHIP; AQP-1; Aquaporin-CHIP; Water channel protein for red blood cells and kidney proximal tubule; CHIP28; Urine water channel

Application Instructions

Application table	Application	Dilution
	FACS	1:150 - 1:500
	IHC-Fr	1:200 - 1:1000
	IHC-P	1:200 - 1:1000
	WB	1:500 - 1:2000
Application Note	IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min, or performed in EDTA buffer (pH 8.0). * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 30 kDa	

Properties

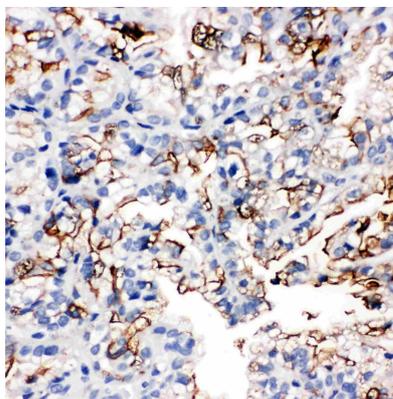
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na ₂ HPO ₄ , 0.9% NaCl, 0.05% Thimerosal, 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Thimerosal and 0.05% Sodium azide
Stabilizer	5% BSA

Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

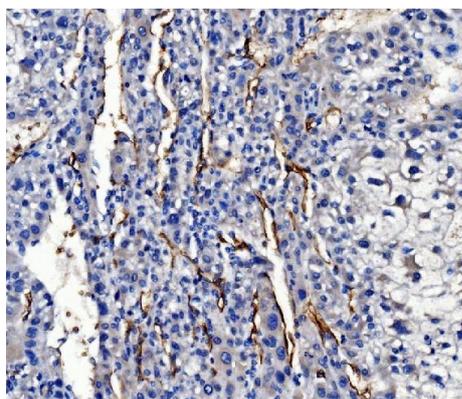
Gene Symbol	AQP1
Gene Full Name	aquaporin 1 (Colton blood group)
Background	Aquaporins are a family of small integral membrane proteins related to the major intrinsic protein (MIP or AQP0). This gene encodes an aquaporin which functions as a molecular water channel protein. It is a homotetramer with 6 bilayer spanning domains and N-glycosylation sites. The protein physically resembles channel proteins and is abundant in erythrocytes and renal tubes. The gene encoding this aquaporin is a possible candidate for disorders involving imbalance in ocular fluid movement. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2010]
Function	Forms a water-specific channel that provides the plasma membranes of red cells and kidney proximal tubules with high permeability to water, thereby permitting water to move in the direction of an osmotic gradient. [UniProt]
Calculated Mw	29 kDa
Cellular Localization	Cell membrane; Multi-pass membrane protein. [UniProt]

Images



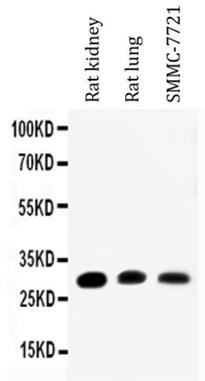
ARG41560 anti-Aquaporin 1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human renal cancer tissue. Antigen Retrieval: Heat mediation in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG41560 anti-Aquaporin 1 antibody at 1 µg/ml dilution, overnight at 4°C.



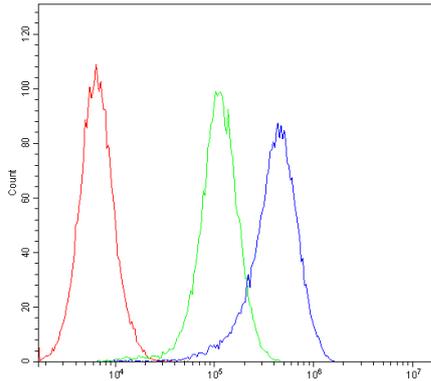
ARG41560 anti-Aquaporin 1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human liver cancer tissue. Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG41560 anti-Aquaporin 1 antibody at 1 µg/ml dilution, overnight at 4°C.



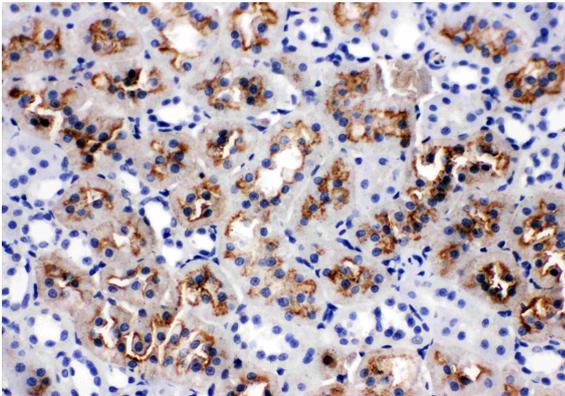
ARG41560 anti-Aquaporin 1 antibody WB image

Western blot: 50 µg of samples under reducing conditions. Rat kidney, Rat lung and SMMC-7721 cell lysates stained with ARG41560 anti-Aquaporin 1 antibody at 0.5 µg/ml dilution, overnight at 4°C.



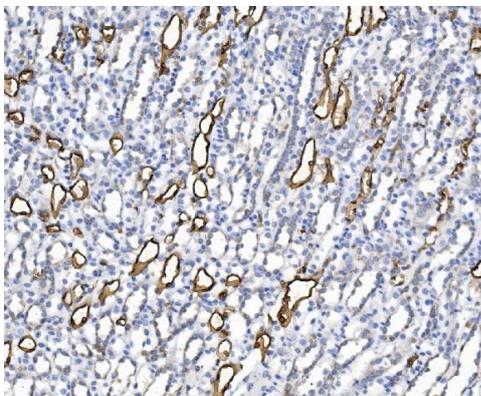
ARG41560 anti-Aquaporin 1 antibody FACS image

Flow Cytometry: U2OS cells were blocked with 10% normal Goat serum and then stained with ARG41560 anti-Aquaporin 1 antibody (blue) at 1 µg/10⁶ cells for 30 min at 20°C, followed by incubation with DyLight[®]488 labelled secondary antibody. Isotype control antibody (green) was Rabbit IgG (1 µg/10⁶ cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



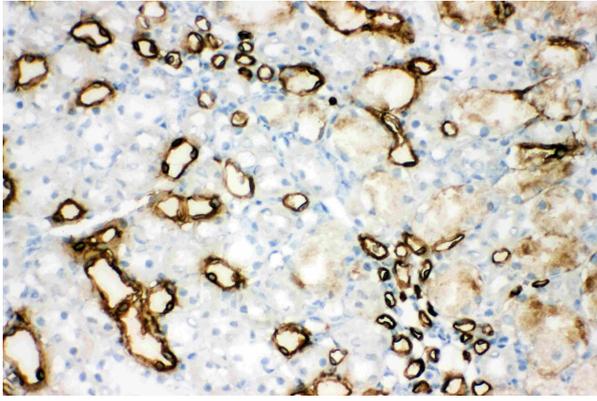
ARG41560 anti-Aquaporin 1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat kidney tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG41560 anti-Aquaporin 1 antibody at 1 µg/ml dilution, overnight at 4°C.



ARG41560 anti-Aquaporin 1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse kidney tissue. Antigen Retrieval: Heat mediation was performed in EDTA buffer (pH 8.0). The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG41560 anti-Aquaporin 1 antibody at 1 µg/ml dilution, overnight at 4°C.



ARG41560 anti-Aquaporin 1 antibody IHC-Fr image

Immunohistochemistry: Frozen section of Rat kidney tissue. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG41560 anti-Aquaporin 1 antibody at 1 $\mu\text{g}/\text{ml}$, overnight at 4°C.