

Rabbit Aquaporin 5/AQP5 Polyclonal Antibody | anti-AQP5 antibody

Anti-Aquaporin 5/AQP5 Antibody

CATALOG # AAA124948	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

Aquaporin 5/AQP5; Polyclonal Antibody; Anti-Aquaporin 5/AQP5 Antibody; Aquaporin-5; AQP-5; AQP5; Aquaporin 5; anti-AQP5 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	No cross reactivity with other proteins.
Purity/Purification	Immunogen Affinity Purified
Form/Format	Lyophilized
Sequence Length	265
Applicable Applications for anti-AQP5 antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide corresponding to a sequence of human Aquaporin 5 (NSLSLSERVAIKGTYPDEDWEEQREERKKTMELTTR).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Relevant Detection Systems	It is recommended to use an Enhanced Chemiluminescent Kit with anti-Rabbit IgG for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit for IHC-P.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



IHC (Immunohiostchemistry)

Figure 3. IHC analysis of Aquaporin 5 using anti-Aquaporin 5 antibody. Aquaporin 5 was detected in paraffin-embedded section of rat lung tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Aquaporin 5 antibody. Aquaporin 5 was detected in paraffin-embedded section of rat lung tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Aquaporin 5 Antibody overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of Aquaporin 5 using anti-Aquaporin 5 antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat lung tissue lysates, Lane 2: mouse lung tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Aquaporin 5 antigen affinity purified polyclonal antibody at 0.5 ug/ml overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Aquaporin 5 at approximately 28KD. The expected band size for Aquaporin 5 is at 28KD.

ADDITIONAL INFORMATION

Related Product Information for anti-AQP5 antibody	<p>Description: Rabbit IgG polyclonal antibody for Aquaporin 5 detection. Tested with WB, IHC-P in Human; Mouse; Rat.</p> <p>Background: Aquaporin 5, also known as AQP5, is a water channel protein. The aquaporins (AQPs) are a family of more than 10 homologous water transporting proteins expressed in many mammalian epithelia and endothelia. At least five AQPs are expressed in the eye: AQP0 (MIP) in lens fiber, AQP1 in cornea endothelium, ciliary and lens epithelia and trabecular meshwork, AQP3 in conjunctiva, AQP4 in ciliary epithelium and retinal Müller cells, and AQP5 in corneal and lacrimal gland epithelia. Among the seven human aquaporins cloned to date (AQPs 0-6), genes encoding the four most closely related aquaporins (AQP0, AQP2, AQP5, and AQP6) have been mapped to chromosome band 12q13, suggesting an aquaporin family gene cluster at this locus. Aquaporin 5 plays a role in the generation of saliva, tears and pulmonary secretions.</p>
References	<p>1. Verkman AS (2003). "Role of aquaporin water channels in eye function.". Exp. Eye Res. 76 (2): 137-43. 2. Ma T, Yang B, Umenishi F, Verkman AS (1997). "Closely spaced tandem arrangement of AQP2, AQP5, and AQP6 genes in a 27-kilobase segment at chromosome locus 12q13.". Genomics 43 (3): 387-9.</p>

NCBI AND UNIPROT INFORMATION

NCBI GI #	4502183
NCBI GeneID	362
NCBI Accession #	NP_001642.1
NCBI GenBank Nucleotide #	NM_001651.4
UniProt Accession #	P55064; Q6FGW8
Molecular Weight	28,292 Da
NCBI Official Full Name	aquaporin-5
NCBI Official Synonym Full Names	aquaporin 5
NCBI Official Symbol	AQP5
NCBI Official Synonym Symbols	PPKB; AQP-5
NCBI Protein Information	aquaporin-5
UniProt Protein Name	Aquaporin-5
UniProt Gene Name	AQP5
UniProt Synonym Gene Names	AQP-5

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/aquaporin-5-aqp5-antibody-immunohistochemistry-western-blot-elisa/124948>