

Rabbit Aquaporin 4 Polyclonal Antibody | anti-Aqp4 antibody

Aquaporin 4 Antibody: RPE

CATALOG # AAA103746	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS Immunofluorescence, Western Blot
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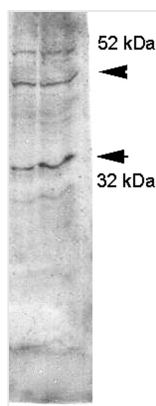
PRODUCT SYNONYMS

Aquaporin 4; Polyclonal Antibody; Aquaporin 4 Antibody: RPE; AQP4; anti-Aqp4 antibody

PRODUCT SPECIFICATIONS

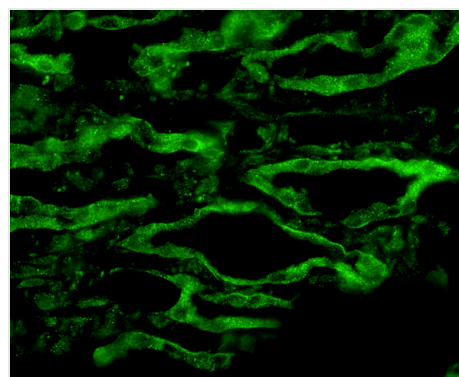
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Form/Format	Affinity Purified
Concentration	1mg/mL (varies by lot)
Sequence Length	323
Applicable Applications for anti-Aqp4 antibody	IF (Immunofluorescence), WB (Western Blot)
Conjugate	RPE
Storage Buffer	PBS pH 7.4, 50% glycerol, 0.09% sodium azide
Preparation and Storage	-20 degree C

IMAGES



WB (Western Blot)

Western blot analysis of Rat kidney inner medullary homogenates showing detection of Aquaporin 4 protein using Rabbit Anti-Aquaporin 4 Polyclonal Antibody (SPC-505). Primary Antibody: Rabbit Anti-Aquaporin 4 Polyclonal Antibody (SPC-505) at 1:2000.



IHC (Immunohistochemistry)

Immunohistochemistry analysis using Rabbit Anti-Aquaporin 4 Polyclonal Antibody (SPC-505). Tissue: kidney tissue. Species: Rat. Fixation: 4% paraformaldehyde-lysine-periodate. Primary Antibody: Rabbit Anti-Aquaporin 4 Polyclonal Antibody (SPC-505) at 1:200 for 75 min at RT. Secondary Antibody: FITC Goat Anti-Rabbit (green) for 1 hour at RT. 4 um cryostat sections.

ADDITIONAL INFORMATION

Related Product Information for anti-Aqp4 antibody	Background Info: Detects ~35kDa. May detect larger glycosylated bands ~50kDa. Scientific Background: Aquaporins selectively conduct water molecules in and out of the cell, while preventing the passage of ions and other solutes. Known as water channels, they are integral membrane pore proteins (1, 2). Aquaporin 4 is constitutively expressed in the basolateral cell membrane of principal collecting duct cells in the kidney and provide a pathway for water to exit these cells (3). It is also expressed in astrocytes and is up regulated by direct insult to the CNS (4). Aquaporin 4 has been proposed as the primary autoimmune target in neuromyelitis optica (5, 6).
Product Categories/Family for anti-Aqp4 antibody	Transporters
References	1. Gonen T., Walz T. (2006) Q. Rev. Biophys. 39(4): 361-396. 2. Knepper M.A. (1994) Proc Natl. Acad Sci. USA. 91(14): 6255-6258. 3. Agre P., Nielsen S. (1996) Nephrologie. 17(7): 409-415. 4. Nagelhus E.A., Mathiesen T.M., Ottersen O.P. (2004) Neuroscience. 129(4): 905-913. 5. Lennon V.A., Kryzer T.J., Pittock S.J., Verkman A.S., Hinson S.R. (2005) J Exp Med. 202(4): 473- 477. 6. Bradl M., Lassmann D.H. (2008) Int. MS Journal/ MS Forum. 15(3): 75-78.

NCBI AND UNIPROT INFORMATION

NCBI GI #	6978531
NCBI GeneID	25293
NCBI Accession #	NP_036957.1
NCBI GenBank Nucleotide #	NM_012825.4
UniProt Accession #	P47863
Molecular Weight	28,768 Da
NCBI Official Full Name	aquaporin-4 isoform 1
NCBI Official Synonym Full Names	aquaporin 4
NCBI Official Symbol	Aqp4
NCBI Official Synonym Symbols	Miwc; AQP-4; MIWC2
NCBI Protein Information	aquaporin-4; WCH4; mercurial-insensitive water channel
UniProt Protein Name	Aquaporin-4
UniProt Gene Name	Aqp4
UniProt Synonym Gene Names	AQP-4; MIWC
UniProt Entry Name	AQP4_RAT

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.