

Datasheet for ABIN6656113
anti-Aquaporin 4 antibody (C-Term)



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2 Images

Overview

Quantity:	100 µL
Target:	Aquaporin 4 (AQP4)
Binding Specificity:	C-Term
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Aquaporin 4 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Fluorescence Microscopy (FM)

Product Details

Purpose:	Aquaporin 4 Antibody
Immunogen:	Aquaporin 4 Antibody was produced from whole rabbit serum prepared by repeated immunizations with a synthetic peptide corresponding to the C-terminal region of rat aquaporin 4.
Isotype:	IgG
Cross-Reactivity (Details):	A BLAST analysis was used to suggest cross-reactivity with Aquaporin 4 from Human, Mouse, and Rat based on 100 % homology with the immunizing sequence.
Purification:	Anti-Aquaporin 4 Antibody was purified by affinity chromatography.
Sterility:	Sterile filtered

Target Details

Target:	Aquaporin 4 (AQP4)
Alternative Name:	Aquaporin 4 (AQP4 Products)
Background:	<p>Synonyms: AQP4, Aquaporin-4, Mercurial-insensitive water channel, MIWC, WCH4</p> <p>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. 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. It is also expressed in astrocytes and is upregulated by direct insult to the CNS. Aquaporin 4 has been proposed as the primary autoimmune target in neuromyelitis optica.</p> <p>Gene Name: Aqp4</p>
Gene ID:	25293
NCBI Accession:	NP_036957
UniProt:	P47863
Pathways:	Sensory Perception of Sound

Application Details

Application Notes:	IF_Microscopy_Dilution: 1:400 Western_Blot_Dilution: 1:1000-4000
Comment:	Anti-Aquaporin 4 Antibody is tested for use in WB, IHC, and IF microscopy. Expect a band approximately ~35kDa on specific lysates. May detect larger glycosylated bands ~50kDa. Specific conditions for reactivity should be optimized by the end user.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: 50 % (v/v) Glycerol Preservative: 0.1 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

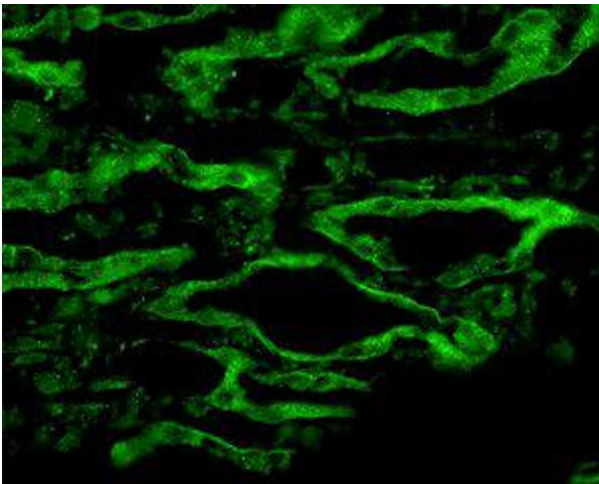
Handling

Storage: 4 °C,-20 °C

Storage Comment: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

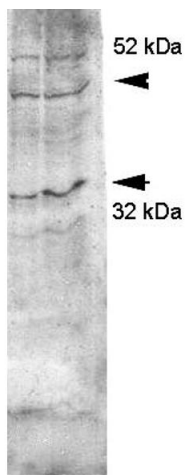
Expiry Date: 12 months

Images



Immunofluorescence

Image 1. Aquaporin 4 Immunofluorescence. Immunofluorescence Microscopy of Rabbit anti-Aquaporin-4 antibody. Tissue: Rat kidney. Fixation: N/A. Primary Antibody: Aquaporin-4 at 1:200 for 1h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min RT. Localization: Membrane. Staining anti-Aquaporin-4 green fluorescent with DAPI stain merge.



Western Blotting

Image 2. Aquaporin 4 Western Blot. Western Blot of Rabbit anti-Aquaporin-4 Antibody. Lane 1-2: Rat kidney tissues. Load: 20ug per lane. Primary antibody: Aquaporin 4 at 1:2000 for overnight at 4°C. Secondary antibody: Goat anti-rabbit IgG HRP antibody at 1:40,000 for 45 min at RT. Block: 5% Biotin overnight at 4°C. Predicted/Observed size: ~35kDa. May detect larger glycosylated bands ~50kDa.