

Aquaporin 4 (AQP4) Antibody

Mouse Monoclonal Antibody [Clone AQP4/3324]

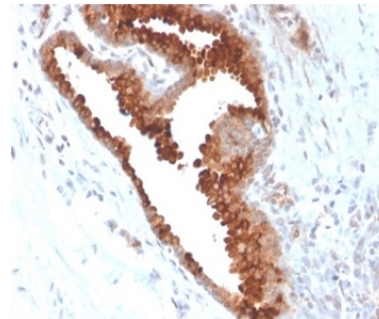
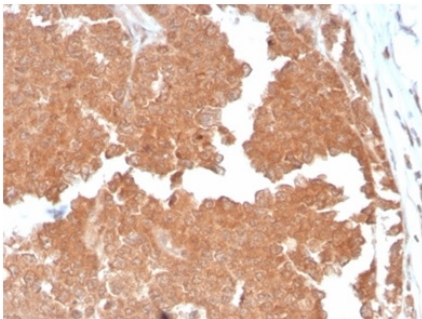
| Catalog No | Format | Size |
|----------------|---|--------|
| 361-MSM4-P0 | Purified Ab with BSA and Azide at 200ug/ml | 20 ug |
| 361-MSM4-P1 | Purified Ab with BSA and Azide at 200ug/ml | 100 ug |
| 361-MSM4-P1ABX | Purified Ab WITHOUT BSA and Azide at 1.0mg/ml | 100 ug |

| Applications | Tested Dillution | Note |
|----------------------------|------------------|---|
| Immunohistochemistry (IHC) | 1-2ug/ml | 30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes |

| Product Details | |
|------------------------|--|
| Clone | AQP4/3324 |
| Gene Name | AQP4 |
| Immunogen | Human recombinant AQP4 protein fragment (around aa200-323) (exact sequence is proprietary) |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype / Light Chain | IgG1 / Kappa |
| Mol. Weight of Antigen | 34kDa |
| Cellular Localization | Basolateral cell membrane, Cell membrane, Cell projection, Endosome membrane, Sarcolemma |
| Species Reactivity | Human |
| Positive Control | Human skeletal muscle, small intestine or brain tissue. |

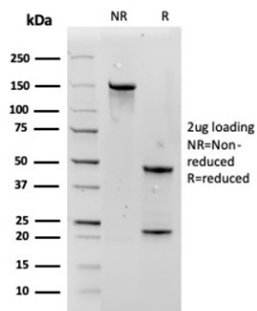
*Optimal dilution for a specific application should be determined.

Product Images for Aquaporin 4 (AQP4) Antibody

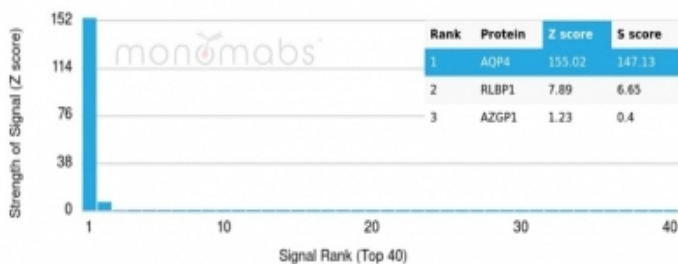


Formalin-fixed, paraffin-embedded human small intestine stained with Aquaporin (AQP4) Mouse Monoclonal Antibody (AQP4/3324). HIER: Tris/EDTA, pH9.0, 45min. 2 °: HRP-polymer, 30min. DAB, 5min.

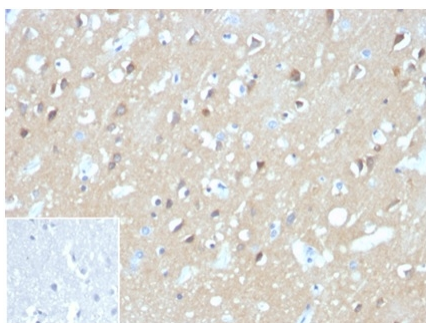
Formalin-fixed, paraffin-embedded human small intestine stained with Aquaporin (AQP4) Mouse Monoclonal Antibody (AQP4/3324). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.



SDS-PAGE Analysis of Purified Aquaporin (AQP4) Mouse Monoclonal Antibody (AQP4/3324). Confirmation of Purity and Integrity of Antibody.



Formalin-fixed, paraffin-embedded human small intestine stained with Aquaporin (AQP4) Mouse Monoclonal Antibody (AQP4/3324). HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.



Formalin-fixed, paraffin-embedded human brain stained with Aquaporin (AQP4) Mouse Monoclonal Antibody (AQP4/3324). Inset: PBS instead of primary antibody; secondary only negative control.

Specificity & Comments

In skeletal muscle, AQP4 (aquaporin 4 also known as mercurial insensitive water channel), localizes to the sarcolemma of fast-twitch muscle fibers. Aquaporins (AQPs) are a large family of integral membrane water transport channel proteins that facilitate the transport of water through the cell membrane. This function is conserved in animals, plants and bacteria. Many isoforms of aquaporin have been identified in mammals, designated AQP0 through AQP10. Aquaporins are widely distributed and it is not uncommon for more than one type of AQP to be present in the same cell. Although most aquaporins are only permeable to water, AQP3, AQP7, AQP9 and one of the two AQP10 transcripts are also permeable to urea and glycerol. AQP2 is the only water channel that is activated by vasopressin to enhance water reabsorption in the kidney collecting duct. Aquaporins are involved in renal water absorption, generation of pulmonary secretions, lacrimation and the secretion and reabsorption of cerebrospinal fluid and aqueous humor.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Neuroscience