

# AQP0 Polyclonal Antibody

Catalog # AP68469

## Product Information

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<b>Application</b>	WB, IHC-P, IF, ICC, E
<b>Primary Accession</b>	<a href="#">P30301</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	28122

## Additional Information

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<b>Gene ID</b>	4284
<b>Other Names</b>	MIP; AQP0; Lens fiber major intrinsic protein; Aquaporin-0; MIP26; MP26
<b>Dilution</b>	WB--Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications. IHC-P--N/A IF--1:50~200 ICC--N/A E--N/A
<b>Format</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
<b>Storage Conditions</b>	-20°C

## Protein Information

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<b>Name</b>	MIP ( <a href="#">HGNC:7103</a> )
<b>Synonyms</b>	AQP0
<b>Function</b>	Aquaporins form homotetrameric transmembrane channels, with each monomer independently mediating water transport across the plasma membrane along its osmotic gradient (PubMed: <a href="#">11001937</a> , PubMed: <a href="#">24120416</a> ). Specifically expressed in lens fiber cells, this aquaporin is crucial for maintaining lens water homeostasis and transparency. Beyond water permeability, it also acts as a cell-to-cell adhesion molecule, forming thin junctions between lens fiber cells that are essential for maintaining the ordered structure and transparency of the lens (PubMed: <a href="#">24120416</a> ).
<b>Cellular Location</b>	Cell membrane; Multi-pass membrane protein {ECO:0000250 UniProtKB:Q6J8I9}. Cell junction {ECO:0000250 UniProtKB:Q6J8I9}. Note=Localizes to thin cell-cell junctions in lens fiber cells. {ECO:0000250 UniProtKB:Q6J8I9}
<b>Tissue Location</b>	Expressed in the cortex and nucleus of the retina lens (at protein level)

(PubMed:30790544). Major component of lens fiber gap junctions (PubMed:24120416).

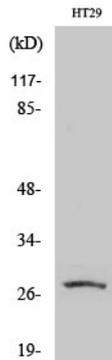
## Background

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Water channel (PubMed: [24120416](#)). Channel activity is down-regulated by CALM when cytoplasmic Ca(2+) levels are increased. May be responsible for regulating the osmolarity of the lens. Interactions between homotetramers from adjoining membranes may stabilize cell junctions in the eye lens core (By similarity). Plays a role in cell-to-cell adhesion and facilitates gap junction coupling (PubMed:[24120416](#)).

## Images

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Western Blot analysis of various cells using AQP0 Polyclonal Antibody

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.