

# Product datasheet

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# ARG59043 anti-MIP / Aquaporin 0 antibody

Package: 50 μg Store at: -20°C

### **Summary**

Product Description Rabbit Polyclonal antibody recognizes MIP / Aquaporin 0

Tested Reactivity Rat
Predict Reactivity Hu
Tested Application WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name MIP / Aquaporin 0

Species Human

Immunogen Synthetic peptide corresponding to aa. 232-263 of Human Aquaporin 0

(ERLSVLKGAKPDVSNGQPEVTGEPVELNTQAL).

Conjugation Un-conjugated

Alternate Names Aquaporin-0; LIM1; AQP0; Lens fiber major intrinsic protein; MIP26; CTRCT15; MP26

## **Application Instructions**

Application table	Application	Dilution
	WB	0.1 - 0.5 μg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### **Properties**

Form Liquid

Purification Affinity purification with immunogen.

Buffer 0.2% Na2HPO4, 0.9% NaCl, 0.05% Sodium azide and 5% BSA.

Preservative 0.05% Sodium azide

Stabilizer 5% BSA

Concentration 0.5 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol MIP

Gene Full Name major intrinsic protein of lens fiber

Background Major intrinsic protein is a member of the water-transporting aquaporins as well as the original

member of the MIP family of channel proteins. The function of the fiber cell membrane protein encoded by this gene is undetermined, yet this protein is speculated to play a role in intracellular communication. The MIP protein is expressed in the ocular lens and is required for correct lens function. This gene has been mapped among aquaporins AQP2, AQP5, and AQP6, in a potential gene

cluster at 12q13. [provided by RefSeq, Jul 2008]

Function Water channel. 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). [UniProt]

Calculated Mw 28 kDa

PTM Subject to partial proteolytic cleavage in the eye lens core. Partial proteolysis promotes interactions

between tetramers from adjoining membranes (By similarity).

Fatty acylated at Met-1 and Lys-238. The acyl modifications, in decreasing order of ion abundance, are: oleoyl (C18:1) > palmitoyl (C16:0) > stearoyl (C18:0) > eicosenoyl (C20:1) > dihomo-gamma-linolenoyl

(C20:3) > palmitoleoyl (C16:1) > eicosadienoyl (C20:2). [UniProt]

Cellular Localization Cell membrane; Multi- pass membrane protein. Cell junction, gap junction. [UniProt]

#### **Images**

Rat eye ball

97KD-

58KD-

40KD-

29KD - -

20KD -

14KD -

#### ARG59043 anti-MIP / Aquaporin 0 antibody WB image

Western blot: 50  $\mu g$  of Rat eye ball lysate stained with ARG59043 anti-MIP / Aquaporin 0 antibody at 0.5  $\mu g/ml$  dilution.