MIP1 | Aquaporin, glycerol transport activity

**Background**
MIP1 (Aquaporin, glycerol transport activity) is localized to the contractile vacuole, which in most freshwater flagellates is used to expel excess water.

**Immunogen**
KLH-conjugated synthetic peptide, derived from *Chlamydomonas reinhardtii* MIP1, UniProt: Q5VLJ9

**Host**
Rabbit

**Clonality**
Polyclonal

**Purity**
Affinity purified serum in PBS, pH 7.4

**Format**
Lyophilized in PBS pH 7.4

**Quantity**
50 µg

**Reconstitution**
For reconstitution add 50 µl of sterile water.

**Storage**
Store lyophilized/reconstituted at -20°C; once reconstituted make aliquots to avoid repeated freeze-thaw cycles. Please, remember to spin tubes briefly prior to opening them to avoid any losses that might occur from lyophilized material adhering to the cap or sides of the tubes.

**Tested applications**
Immunogold (IG), Western blot (WB)

**Related products**
- *Chlamydomonas reinhardtii* antibody collection
- Algal protein extraction buffer
- Secondary antibodies

**Application information**

**Recommended dilution**
1 : 200 (IG), 1 : 10 000 (WB)

**Expected | apparent MW**
31.5 | 43 kDa

**Confirmed reactivity**
*Chlamydomonas reinhardtii* (strains CC3395, and UVM4 from Neupert et al., 2009. (Generation of Chlamydomonas Strains that Efficiently Express Nuclear Transgenes.)

**Predicted reactivity**
*Chlamydomonas reinhardtii*

**Not reactive in**
No confirmed exceptions from predicted reactivity are currently known.

**Additional information**
As MIP1 is a membrane protein please use a high redox potential in your lysis buffer.

**Selected references**
10 µg of total protein from 15ml cell suspension of *Chlamydomonas reinhardtii* CC3395, with a cell density of (~ 10 times 8) extracted with SDS buffer supplemented with Protease inhibitor (cOmplete Ultra tablets, EDTA free, Roche, Mannheim), after removal of the cell debris via centrifugation, DTT was added (100mM final concentration) and were separated on 12 % SDS-PAGE and blotted 1h to PVDF using tank transfer. Blots were blocked with RotiBlock-Solution (Roth, Darmstadt) for 1h at room temperature (RT) or at 4°C ON with agitation. Blot was incubated in the primary antibody at a dilution of 1:10,000 in TBS with 2% milk powder for 1h at RT with agitation. The antibody solution was decanted and the blot was washed 3 times for 10 minutes each with TBS-T at RT with agitation. Blot was incubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated, from Sigma, St.Luis, MO) diluted to 1:80 000 in TBS tith 5% milk powder for 1h at RT with agitation. The blot was washed as above and developed for 1-2 min with ECL according to the manufacturer’s instructions. Exposure time was 40 seconds.

Courtesy of Dr. Karin Komsic-Buchmann and Prof. Dr. Burkhard Becker, University of Cologne, Germany