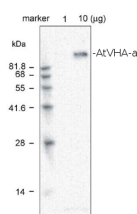


Product no **AS09 466****V-ATPase, a | Vacuolar H⁺ ATPase, subunit a****Product information**

Immunogen	KLH-coupled synthetic peptide derived from <i>Arabidopsis thaliana</i> V-ATPase subunit a, Q9SJT7, At2g21410
Host	Rabbit
Clonality	Polyclonal
Purity	Serum
Format	Lyophilized
Quantity	100 µl
Reconstitution	For reconstitution add 100 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 the tubes briefly prior to opening them to avoid any losses that might occur from material adhering to the cap or sides of the tube.
Additional information	0.1 % sodium azide is added as preservative. For antibody re-suspending information check the tube label. Antibodies will detect target protein in a few µg of a crude preparation loaded per well. If purified preparations of vacuolar membranes are used, one µg load per well should be sufficient. Protocol of isolation of plant vacuolar membranes can be found here .

Application information

Recommended dilution	1 : 8000 (ELISA), 1 : 2000 (WB)
Expected apparent MW	93 100 kDa (<i>Arabidopsis thaliana</i>)
Confirmed reactivity	<i>Arabidopsis thaliana</i> , <i>Cucumis sativus</i> , <i>Oryza sativa</i>
Predicted reactivity	<i>Chlamydomonas reinhardtii</i> , <i>Physcomitrium patens</i> , <i>Populus balsamifera</i> , <i>Ricinus communis</i> , <i>Vitis vinifera</i> Species of your interest not listed? Contact us
Not reactive in	<i>Thermotoga neapolitana</i>
Additional information	Protein or membrane sample should be treated at 70°C for 10 min before loading on the gel. Diluted antibody solution can be used 2 to 3 times within one month if it contains 0.1 % sodium azide as preservative and is stored at -20°C to -80°C.
Selected references	Xing et al. (2016) . Proteome Profile of Starch Granules Purified from Rice (<i>Oryza sativa</i>) Endosperm. PLoS One. 2016 Dec 19;11(12):e0168467. doi: 10.1371/journal.pone.0168467. Migocka et al. (2013) . NO ₃ ⁻ /H ⁺ Antiport in the Tonoplast of Cucumber Root Cells Is Stimulated by Nitrate Supply: Evidence for a Reversible Nitrate-Induced Phosphorylation of Vacuolar NO ₃ ⁻ /H ⁺ Antiport. PLoS One. 2013 Sep 11;8(9):e73972. doi: 10.1371/journal.pone.0073972. Fumiyoshi et al. (2005) . Novel type aquaporin SIPs, are mainly localized the ER membrane and show cell-specific expression in <i>Arabidopsis thaliana</i> . FEBS Lett. 579: 5814-58200. Yoshihiro et al. (2004) . Zinc transporter of <i>Arabidopsis thaliana</i> AtMTP1 is localized to vacuolar membranes and implicated in zinc homeostasis. Plant Cell Physiol. 45: 1749-1758.

Application example

1 µg and 10 µg of crude membrane fraction/lane from *Arabidopsis thaliana* were separated on 12 % **SDS-PAGE** and blotted 1h to **PVDF membrane** (40 min. at 10 V using BioRad semidry transfer). Filters were blocked 1h with 5 % low-fat **milk powder** in TBS-T (0.05% Triton X.100). Membranes were washed 5 times with TBS-T, each time in a fresh polystyrene box and probed with anti-V-ATPase, a (AS09 466, **1:2000**, 1h) and secondary anti-rabbit (**1:2000**, 1 h). All steps were performed in RT with agitation.