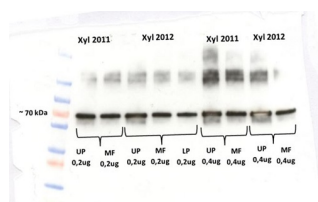


Product no **AS12 1849****Anti-V-PPase | vacuolar H⁺-pyrophosphatase****Product information**

Immunogen	KLH-conjugated synthetic peptide derived from <i>Arabidopsis thaliana</i> V-PPase, UniProt P31414 , TAIR AT1G15690
Host	Rabbit
Clonality	Polyclonal
Purity	Serum
Format	Lyophilized
Quantity	50 µl
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 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	Antibodies will detect target protein in 1 µg of a crude membrane preparation loaded per well, If purified preparations of vacuolar and plasma membranes are used, less than µg load per well should be sufficient

Application information

Recommended dilution	1 : 8000 (ELISA), 1 : 100 (IL), 1 : 2000 (WB)
Expected apparent MW	80.8 73 kDa (<i>Arabidopsis thaliana</i>)
Confirmed reactivity	<i>Arabidopsis thaliana</i> , <i>Cucumis sativus</i> , <i>Dunaliella bardawil</i> , <i>Hordeum vulgare</i> , <i>Nicotiana tabacum</i> , <i>Picea abies</i> , <i>Vitis vinifera</i>
Predicted reactivity	<i>Oryza sativa</i> , <i>Ricinus communis</i> , <i>Populus trichocarpa</i> , <i>Saccharum officinarum</i> , <i>Zea mays</i> , <i>Vigna radiata</i> Species of your interest not listed? Contact us
Not reactive in	No confirmed exceptions from predicted reactivity are currently known
Additional information	Protein or membrane sample should be treated at 70°C for 10 min before loading on the gel
Selected references	Hofmann , Wienkoop & Luthje (2022) Hypoxia-Induced Aquaporins and Regulation of Redox Homeostasis by a Trans-Plasma Membrane Electron Transport System in Maize Roots. <i>Antioxidants</i> (Basel). 2022 Apr 25;11(5):836. doi: 10.3390/antiox11050836. PMID: 35624700; PMCID: PMC9137787. Prinsi et al. (2020). Root Proteomic Analysis of Two Grapevine Rootstock Genotypes Showing Different Susceptibility to Salt Stress. <i>Int J Mol Sci</i> . 2020 Feb 6;21(3). pii: E1076. doi: 10.3390/ijms21031076. Patir-Nebioglu et al. (2019). Pyrophosphate modulates plant stress responses via SUMOylation. <i>Elife</i> . 2019 Feb 20;8. pii: e44213. doi: 10.7554/eLife.44213. Migocka et al. (2015). Cucumber Metal Transport Protein CsMTP9 is a plasma membrane H ⁺ -coupled antiporter involved in the Mn ²⁺ and Cd ²⁺ efflux from root cells. <i>Plant J</i> . 2015 Oct 20. doi: 10.1111/tpj.13056. Migocka et al. (2014). Molecular and biochemical properties of two P 1B2 -ATPases, CsHMA3 and CsHMA4, from cucumber. <i>Plant Cell Environ</i> . 2014 Sep 11. doi: 10.1111/pce.12447.

Application example

Different amounts (depending of the tissue) of membrane proteins from developing xylem tissue of Norway spruce were separated in a gradient (4-15 %) SDS-PAGE gel and blotted 30 min to nitrocellulose membrane using a standard semi-dry Trans-Blot® Turbo™ (Bio-Rad) system. Blots were blocked with 5% non-fat milk protein for 1 h at room temperature (RT) with agitation. Blot was incubated in the primary antibody V-PPase (Agrisera) at a dilution of 1: 5 000 overnight with agitation. The antibody solution was decanted and the blot was rinsed briefly, and then washed 3 times for 15 min in TBS-T at RT with agitation. Blot was incubated in the secondary antibody (anti-rabbit IgG horseradish peroxidase conjugate, from Agrisera, [AS09 602](#)) diluted to 1: 10 000 for 1 h at RT with agitation. The blot was washed as above and the presence of V-PPase detected

with ECL according to the manufacturer's instructions. Exposure time was ~ 1 second.

Courtesy of Luis Alexis Jimenez Barboza