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Product no AS09 485

MTP1 | vacuolar Zn2+/H+ antiporter

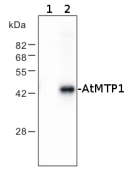
Product information

Immunogen	KLH-conjugated synthetic peptide derived from *Arabidopsis thaliana* MTP1 UniProt:Q9ZT63, TAIR:At2g46800
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 lable. MTP1 protein is of low abundance in plant tissues.

Application information

Recommended dilution	1 : 8000 (ELISA), 1 : 1000 (WB)
Expected | apparent MW	43.8 | 43 kDa (*Arabidopsis thaliana*)
Confirmed reactivity	*Arabidopsis thaliana, Nicotiana tabacum*
Predicted reactivity	*Brassica sp. , Noccaea fendleri, Thlaspi caerulescens* Species of your interest not listed? Contact us
Not reactive in	*Hordeum vulgare*, *Solanaceae* sp.
Additional information	Protein or membrane sample should be treated at 70°C for 10 min before loading on the gel
Selected references	Vera-Estrella et al. (2017). Cadmium and zinc activate adaptive mechanisms in Nicotiana tabacum similar to those observed in metal tolerant plants. Planta. 2017 Apr 28. doi: 10.1007/s00425-017-2700-1. Kawachi et al. (2008). Deletion of a histidine-rich loop of AtMTP1, a vacuolar Zn(2+)/H(+) antiporter of Arabidopsis thaliana, stimulates the transport activity. J.Biol. Chem. 13:8374-8383. Kobae et al. (2004). Zinc transporter of Arabidopsis thaliana AtMTP1 is localized to vacuolar membranes and implicated in zinc homeostasis. Plant Cell Physiol. 12:1749-1758.

Application example



Sample of a vector **(1)** and vacuolar membrane fraction of yeast cells expressing AtMTP1 **(2)** 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-AtMTP1 antibodies (AS09 485, **1:1000**, 1h) and secondary anti-rabbit (**1:2000,** 1 h). All steps were performed in RT with agitation.