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contact: support@agrisera.com

Agrisera AB | Box 57 | SE-91121 Vännäs | Sweden | +46 (0)935 33 000 | www.agrisera.com

Product no AS09 485 Anti-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 μΙ
Reconstitution	For reconstitution add 100 μ l 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 (<i>Arabidopsis thaliana</i>)
Confirmed reactivity	Arabidopsis thaliana, Nicotiana tabacum
Predicted reactivity	<i>Brassica sp. , Noccaea fendleri, Thlaspi caerulescens</i> Species of your interest not listed? <u>Contact us</u>
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	<u>Vera-Estrella</u> 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. <u>Kawachi</u> 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. <u>Kobae</u> 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.