Agrisera
Part of Olink® Group

This product is **for research use only** (not for diagnostic or therapeutic use) **contact: support@agrisera.com**

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

Product no AS06 122

CRD1 | Cyanobacterial homolog of plant CHL27 cyclase

Product information

Immunogen	residues 1-409 from *Arabidopsis thaliana* CHL27 fused to TrxA UniProt: Q9M591,TAIR: At3g56940
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	[compartment marker] of chloroplast thylakoid and envelope membranes

Application information

Recommended dilution	1 : 3000 (WB)
Expected | apparent MW	47 | 40 kDa (*Arabidopsis thaliana*)
Confirmed reactivity	*Arabidosps thaliana, Horderum vulgare, Nicotiana tabacum, Pisum sativum, Physcomitrium patens, Chlamydomonas reinhardtii*, purple bacteria (CRD1) and (CHL27), *Synechocystis* PCC 6803, anoxygenic phototrophs (proeobacteria): *Congregibacter litoralis, Roseobacter litoralis*, green non-sulfur bacterium: *Chloroflexus aurantiacus*, photosynthetic bacterium: *Rubriviavax gelatinosus*
Predicted reactivity	Cyanobacteria, *Gossyium hirsutum, Euphorbia esula, Hordeum vulgare, Nannochloropsis gaditana, Ricinus communis* Species of your interest not listed? Contact us
Not reactive in	No confirmed exceptions from predicted reactivity are currently known
Additional information	Antibodies detect two isoforms in *Chlamydomonas reinhardtii*, CRD1 in cells grown under copper deficiency (39.8 kDa) and CTH1 in cells grown with sufficient copper (40.7 kDa). Antibodies will also react with *Arabidopsis thaliana*, *Hordeum vulgare, Pisum sativum*, and purple bacteria
Selected references	Wang et al. (2020). Post-translational coordination of chlorophyll biosynthesis and breakdown by BCMs maintains chlorophyll homeostasis during leaf development. Nat Commun. 2020; 11: 1254. Cha et al. (2019). Arabidopsis GIGANTEA negatively regulates chloroplast biogenesis and resistance to herbicide butafenacil. Plant Cell Rep. 2019 Jul;38(7):793-801. doi: 10.1007/s00299-019-02409-x. Canniffe et al. (2014). Elucidation of the preferred routes of C8-vinyl reduction in chlorophyll and bacteriochlorophyll biosynthesis. Biochem J. 2014 Jun 19. Lang et al. (2011).Simultaneous isolation of pure and intact chloroplasts and mitochondria from moss as the basis for sub-cellular proteomics. Plant Cell Rep. 2011 Feb;30(2):205-15.doi: 10.1007/s00299-010-0935-4.