

Product: Anti-CCS (The copper chaperone for SOD)

Product no: AS07 219

Antibodies for plant sciences

Product Information

Antibody clonality: Polyclonal

Raised in: Rabbit

Purity: Serum

Quantity: 200 µl

Antibody form: Lyophilized. For reconstitution please add 200 µl of sterile water. Please, remember to spin tubes briefly prior to opening them to avoid any losses that might occur from liquid or lyophilized material adhering to the cap or sides of the tubes.

Storage instructions: -20°C or -80°C long Term storage (years). Please, avoid freezing and thawing of antibodies. Make aliquots instead.

Background

Copper is an essential element for function of chloroplasts. It is a co-factor for superoxide dismutase (SOD) and for plastocyanin. Copper is transported to chloroplasts with a help of Copper Chaperones, which carry out the delivery of copper from transporters to targets. In the last step chaperone binds to a copper dependent enzyme and inserts the copper ions into its active site. The *Arabidopsis thaliana* gene AtCCS encodes a copper chaperone for SOD. The AtCCS protein was localized to chloroplasts where it may supply copper to the stromal Cu/ZnSOD.

Immunogen: The antibody was raised to the full length protein fused to His-tag. Overexpressed using pET28a vector in Bl21 E. coli (Cd+) and purified using His-column. After purification, the His tag was cleaved using thrombin and then the protein was purified using Resource-Q column connected to HPLC. The gene accession # is At1g12520

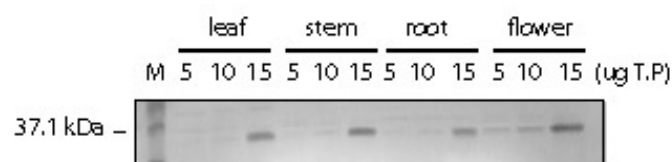
References: AtCCS is a functional homolog of the yeast copper chaperone Ccs1/Lys7. Abdek-Ghany SE et al. FEBS Lett. 2005 Apr 25;579(11):2307-12.

Application information:

Western Blot: 1: 1 000 with alkaline phosphatase

MW: 37 kDa

Reactivity: *Arabidopsis thaliana*, *B. juncea*, corn and maize



5 or 10 µg of total protein from different tissues of *Arabidopsis thaliana* (grown on soil) have been loaded per well.

Membrane used for transfer of proteins was nitrocellulose. Blocking has been done in 3% milk in TBST for 1 h at room temp. Incubation with primary antibody has been done in 1% milk in TBST for 2-3 h. Secondary antibodies conjugated to alkaline phosphatase (Sigma) were used at 1:10 000 in TBST for 1 h.

Antibodies are intended for the research use only not for diagnostic or therapeutic use.

Product support: inquiry@agrisera.com, <http://www.agrisera.com>

Mailing address: Box 57, S-911 21 Vännäs, Sweden
Phone/Fax: +46 (0)935 33033 / +46 (0)935 33044
Website: www.agrisera.com

International Bank Account Number (IBAN)
SE42 6000 0000 0001 15217258, S.W.I.F.T. address: HANDSES
Bank: Svenska Handelsbanken, S-106 70 Stockholm, Sweden
VAT number: SE556263276901 (Tax identification number)