

Product no **AS06 170****CSD2 | Chloroplastic Cu/Zn superoxide dismutase****Product information**

Immunogen	overexpressed <i>Arabidopsis thaliana</i> Cu/ZnSOD O78310 , At2g28190 with an N-terminal His-tag. Purified via Ni-column. The His-tag was cleaved and the protein was recovered via ion exchange on a 10 ml resource-Q (Pharmacia) column using a NaCl gradient. Pure fractions after dialysis against PBS has been used for immunization.
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 | This product can be sold containing ProClin if requested.**Application information**

Recommended dilution	1 : 1000-1 : 4000 (WB)
Expected apparent MW	22 19 kDa (<i>Arabidopsis thaliana</i>)
Confirmed reactivity	<i>Arabidopsis thaliana</i> , <i>Armeria maritima</i> , <i>Brassica juncea</i> , <i>Digitaria sanguinalis</i> , <i>Echinochloa crus-galli</i> , <i>Eragrostis tef</i> , <i>Impatiens walleriana</i> , <i>Iris pumila</i> , <i>Liquidambar formosana</i> , <i>Medicago sativa</i> , <i>Musa acuminata</i> , <i>Musa paradisiaca</i> L., <i>Nepeta cataria</i> , <i>Nepeta rtanjensis</i> , <i>Oryza sativa</i> , <i>Phalenopsis Sogo Yukidian cultivar V3</i> , <i>Phaseolus vulgaris</i> , <i>Pisum sativum</i> , <i>Populus</i> sp., <i>Schima superba</i> , <i>Solanum lycopersicum</i> , <i>Solanum tuberosum</i> , <i>Zea mays</i>
Predicted reactivity	<i>Cucumis melo</i> , <i>Glycine max</i> , <i>Pinus pinaster</i> , <i>Spinacia oleracea</i> Species of your interest not listed? Contact us
Not reactive in	No confirmed exceptions from predicted reactivity are currently known
Additional information	Note: Antibody is recognizing 19 kDa protein Csd2 (chloroplastic enzyme) and gives also low but noticeable reactivity to Csd1 (15 kDa) a cytosolic form
Selected references	Zhuang et al (2021). EGY3 mediates chloroplastic ROS homeostasis and promotes retrograde signaling in response to salt stress in Arabidopsis. Cell Rep. 2021 Jul 13;36(2):109384. doi: 10.1016/j.celrep.2021.109384. PMID: 34260941. Wang et al. (2021). Brassinosteroids inhibit miRNA-mediated translational repression by decreasing AGO1 on the endoplasmic reticulum. J Integr Plant Biol. 2021 May 21. doi: 10.1111/jipb.13139. Epub ahead of print. PMID: 34020507. Fesharaki-Esfahani et al. (2021) A highly efficient, thermo stable and broad pH adaptable copper-zinc super oxide dismutase (AmSOD1) mediates hydrogen peroxide tolerance in Avicennia marina, Phytochemistry, Volume 187, 2021, 112766, ISSN 0031-9422, https://doi.org/10.1016/j.phytochem.2021.112766 . Konkolewska et al. (2020). Combined use of companion planting and PGPR for the assisted phytoextraction of trace metals (Zn, Pb, Cd). Shinozaki et al. (2020). Autophagy Increases Zinc Bioavailability to Avoid Light-Mediated ROS Production under Zn Deficiency. Plant Physiol. 2020 Jan 15. pii: pp.01522.2019. doi: 10.1104/pp.19.01522.