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**Product no** AS10 652

# Anti-Cu/ZnSOD | Cu/Zn superoxide dismutase

## Product information

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|---|---|
| **Immunogen** | 15 amino acids synthetic peptide designed from olive pollen cytosolic Cu/Zn cDNA consensus sequences (GenBank Accessions EU250757 to EU250797), UniProt Q8L5E0 |
| **Host** | Chicken |
| **Clonality** | Polyclonal |
| **Purity** | Purified, total IgY in 10 mM Tris, 150 mM NaCl, 0.02% sodium azide. |
| **Format** | Liquid |
| **Quantity** | 100 µl |
| **Storage** | Store at 4°C. 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** | Total IgY concentration is 2.3 mg/ml.<br><br>Reaction of the antibody to chloroplastic SOD isoform has not been determined yet. |

## Application information

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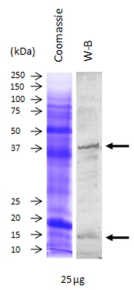
| **Recommended dilution** | 1 : 1500 with Alexa 488 (WB) |
| **Expected \| apparent MW** | 15.3 \| 16 kDa (*Olea europaea* L.) |
| **Confirmed reactivity** | *Arabidopsis thaliana* (leaves), *Lilium longiflorum*, *Olea europaea* (pollen), *Oryza sativa, Spinacia oleracea* (leaves), *Solanum lycopersicum*, *Zea mays* |
| **Predicted reactivity** | *Ananas ananas, Betula pendula, Camellia sinensis, Codonis lanceolata, Cucurbita ficifolia, Helianthus sp., Hordeum vulgare, Lycopersicum esculentum, Plantago major*, *Populus trichocarpa, Solanum nigrum, Solanum tuberosum, Solidago* sp., *Vitis vinifera*<br><br>Species of your interest not listed? Contact us |
| **Not reactive in** | *Helianthus annuus , Nicotiana tabacum, Marchantia polymorpha, Musa acuminata, Physcomitrium patens, Vicia faba* |
| **Additional information** | Note: Antibody recognizes two to three isoforms of Cu/Zn SOD in olive pollen depending on the olive cultivar |
| **Selected references** | Adhikari et al. (2018). Sulfate improves cadmium tolerance by limiting cadmium accumulation, modulation of sulfur metabolism and antioxidant defense system in maize. Environmental and Experimental Botany Volume 153, September 2018, Pages 143-162.<br>Bastow et al. (2018). Vacuolar Iron Stores Gated by NRAMP3 and NRAMP4 Are the Primary Source of Iron in Germinating Seeds. Plant Physiol. 2018 Jul;177(3):1267-1276. doi: 10.1104/pp.18.00478.<br>Alché et al. (1998). Identification and immunolocalization of superoxide dismutase isoenzymes of olive pollen". Physiol. Plantarum 104, 772-776. |

## Application example




**25 µg** of total protein from *Olea europaea* pollen were separated on 12% acrylamide gels and blotted onto PVDF. Membranes were blocked 1h with 2% low-fat milk powder in TBS-T (0.1% TWEEN 20) and probed with anti-Cu/Zn SOD (AS10 652, 1:1500, overnight, 4º C) and secondary antibody anti-chicken IgG conjugated to Alexa 488 (1:2000, 1 h) (Molecular Probes, Invitrogen). Signal was detected with a PharosSX fluorescence scanner (Bio-Rad).

The antibody recognizes a protein of c.a. 16 kDa. and another band likely corresponding to the protein dimer.

Courtesy Dr. Juan de Dios Alche, CSIC, Spain