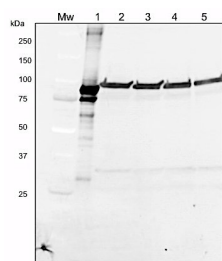


Product no **AS06 128****Anti-LOX | Lipoygenase****Product information**

<b>Immunogen</b>	Native lipoygenase, type I-B, purified from <i>Glycine max</i> (Sigma, product number <u>L7395</u> ) UniProt: <u>P08170</u>
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Purity</b>	Serum
<b>Format</b>	Lyophilized
<b>Quantity</b>	50 µl
<b>Reconstitution</b>	For reconstitution add 50 µl of sterile water
<b>Storage</b>	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.

**Application information**

<b>Recommended dilution</b>	1 : 50 (IF), 1 : 1000 (WB)
<b>Expected   apparent MW</b>	54 (subunit), 108 (native enzyme)
<b>Confirmed reactivity</b>	<i>Arabidopsis thaliana</i> , <i>Glycine max</i> , <i>Lilium longiflorum</i> , <i>Lupinus luteus</i> , <i>Musa acuminata</i> , <i>Musa paradisiaca</i> L., <i>Nicotiana benthamiana</i> , <i>Olea europaea</i> , <i>Oryza sativa</i>
<b>Predicted reactivity</b>	<i>Glycine max</i> , <i>Lathyrus undulatus</i> , <i>Malus x domestica</i> , <i>Solanum tuberosum</i> , <i>Vicia faba</i> Species of your interest not listed? <a href="#">Contact us</a>
<b>Not reactive in</b>	<i>Chlamydomonas reinhardtii</i>
<b>Selected references</b>	<u>Burchardt</u> et al. (2024). Exploring the response of yellow lupine ( <i>Lupinus luteus</i> L.) root to drought mediated by pathways related to phytohormones, lipid, and redox homeostasis. <i>BMC Plant Biol</i> . 2024 Nov 6;24(1):1049. doi: 10.1186/s12870-024-05748-4. (Immunofluorescence) <u>Kucko</u> et al. (2022) The acceleration of yellow lupine flower abscission by jasmonates is accompanied by lipid-related events in abscission zone cells, <i>Plant Science</i> , Volume 316, 2022,111173, ISSN 0168-9452, <a href="https://doi.org/10.1016/j.plantsci.2021.111173">https://doi.org/10.1016/j.plantsci.2021.111173</a> . ( <a href="https://www.sciencedirect.com/science/article/pii/S0168945221003691">https://www.sciencedirect.com/science/article/pii/S0168945221003691</a> ) <u>Zhu</u> et al. (2021) Physiological and Proteomic Analyses Reveal Effects of Putrescine-Alleviated Aluminum Toxicity in Rice Roots[J]. <i>RICE SCI</i> , 0, (): 3-. <u>Castro</u> et al. (2020). Identification of seed storage proteins as the major constituents of the extra virgin olive oil proteome. <i>Food Chem X</i> . 2020 Jun 27;7:100099.doi: 10.1016/j.fochx.2020.100099. <u>Yang</u> et al. (2012). Quantitative proteomic analysis reveals that antioxidation mechanisms contribute to cold tolerance in plantain ( <i>Musa paradisiaca</i> L.; ABB Group) seedlings. <i>Mol Cell Proteomics</i> . 2012 Dec;11(12):1853-69. doi: 10.1074/mcp.M112.022079. <u>Huang</u> et al. (2011). Cloning and characterization of a 9-lipoxygenase gene induced by pathogen attack from <i>Nicotiana benthamiana</i> for biotechnological application. <i>BMC Biotechnol</i> . 2011 Mar 30;11:30. doi: 10.1186/1472-6750-11-30.

**Application example**

Samples of *Arabidopsis thaliana* (2), *Olea europaea* (3), *Lilium Longiflorum* (4), *Lupinus luteus* (5) were ground in liquid nitrogen to a very fine powder using a mortar and pestle and resuspended in 1.5 ml of extraction buffer (4% SDS, 2% 2-mercaptoethanol, 2 mM PMSF, 100 mM Tris-HCl pH 8.5). The samples were incubated for 3 min at 80°C. Protein suspensions were clarified by centrifugation at 13,500 g for 10 min at room temperature and the resulting supernatants were used. Total proteins (25 µg per sample) were separated by SDS-PAGE on

CriterionTMTGXTM Precast Gel (Bio-Rad, USA) using CriterionTM Cell apparatus (Bio-Rad). Proteins were electroblotted onto a PVDF membrane using Trans-Blot® TurboTM Transfer Pack (Bio-Rad) in a Trans-Blot® TurboTM Transfer System (Bio-Rad). The membrane was blocked for 1 h in solution containing 1 % (w/v) non-fat dry milk in TRIS-buffered saline (TBS) buffer, pH 7.4. The membrane was incubated in the primary antibody at a dilution of 1: 1000 in TBS buffer containing 1 % (w/v) non-fat dry milk over night at 4°C with agitation. A DyLight 488 conjugated anti-rabbit IgG ([AS10 831](#), Agrisera), diluted 1:2000 in TBS buffer for 2 h, served as the secondary antibody. The signal was detected in a Pharos FX molecular imager (Bio-Rad). Line 1 contains LOX protein from Sigma.

Courtesy of Dr. Agnieszka Zienkiewicz, CSIC, Spain