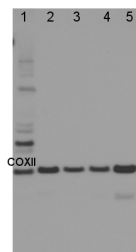


Product no **AS04 053A****Anti-COXII | Plant Cytochrome oxidase subunit II (affinity purified)****Product information**

<b>Immunogen</b>	KLH-conjugated synthetic peptide fully conserved in all available protein sequences from eudicots including <i>Arabidopsis thaliana</i> <a href="#">AtmG00160</a> , monocots including <i>Oryza sativa</i> <a href="#">P04373</a> and <i>Physcomitrella patens</i> <a href="#">Q1XGA9</a>
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Purity</b>	Immunogen affinity purified serum in PBS pH 7.4.
<b>Format</b>	Lyophilized
<b>Quantity</b>	50 µg
<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.
<b>Additional information</b>	Cellular <b>[compartment marker]</b> of mitochondrial inner membrane

**Application information**

<b>Recommended dilution</b>	1 : 1000 (BN-PAGE), 1 : 1000 (WB)
<b>Expected   apparent MW</b>	29.4   30 kDa (for <i>Arabidopsis thaliana</i> )
<b>Confirmed reactivity</b>	<i>Actinidia chinensis</i> , <i>Arabidopsis thaliana</i> (leaf extract and isolated mitochondria), <i>Betula nana</i> , <i>Brassica napus</i> , <i>Brassica oleracea</i> , <i>Cicer arietinum</i> , <i>Cucumis melo</i> , <i>Cucumis sativus</i> , <i>Erophorum vaginatum</i> , <i>Hordeum vulgare</i> , <i>Lilium longifolium</i> , <i>Nicotiana tabacum</i> , <i>Picea abies</i> , <i>Plantago major</i> , <i>Plantago euryphylla</i> , <i>Silene uniflora</i> , <i>Silene dioica</i> , <i>Physcomitrium patens</i> , <i>Triticum aestivum</i> , <i>Triticum durum</i> Desf., <i>Zea mays</i> , <i>Vicia faba</i> , <i>Quercus rubra</i>
<b>Predicted reactivity</b>	<i>Cucumis melo</i> , <i>Glycine max</i> , <i>Gossypium hirsutum</i> , <i>Neurachne alopecuroidea</i> , <i>Neurachne minor</i> , <i>Neurachne muelleri</i> , <i>Oryza sativa</i> , <i>Physcomitrium patens</i> , <i>Pisum sativum</i> , <i>Triticum aestivum</i> , <i>Vigna radiata</i>
	Species of your interest not listed? <a href="#">Contact us</a>
<b>Not reactive in</b>	<i>Mangifera indica</i> , <i>Saccharina japonica</i>
<b>Additional information</b>	Antibody detects COXII protein most optimally in membrane fractions. The signal is weak in a total protein extract.  Blue Native gel electrophoresis (BN-PAGE) has been performed on samples solubilized with digitonin (4:1) and loaded at 100 µg/well. Gel thickness was 2 mm with 4.5-16 % gradient.
<b>Selected references</b>	<a href="#">Sharma et al. (2025)</a> . Comprehensive endoplasmic reticulum proteomics analysis in chickpea ( <i>Cicer arietinum</i> L.): unveiling cellular secrets. <i>Journal of Proteins and Proteomics</i> , doi.org/10.1007/s42485-025-00173-z <a href="#">Ciesielska et al. (2024)</a> . S2P2-the chloroplast-located intramembrane protease and its impact on the stoichiometry and functioning of the photosynthetic apparatus of <i>A. thaliana</i> . <i>Front Plant Sci.</i> 2024 Mar 15;15:1372318. doi: 10.3389/fpls.2024.1372318. <a href="#">Xue et al. (2023)</a> . The PtdIns3P phosphatase MtMP promotes symbiotic nitrogen fixation via mitophagy in <i>Medicago truncatula</i> . <i>iScience</i> . 2023 Sep 15;26(10):107752.doi: 10.1016/j.isci.2023.107752. <a href="#">Hofmann, Wienkoop &amp; Luthje (2022)</a> Hypoxia-Induced Aquaporins and Regulation of Redox Homeostasis by a Trans-Plasma Membrane Electron Transport System in Maize Roots. <i>Antioxidants</i> (Basel). 2022 Apr 25;11(5):836. doi: 10.3390/antiox11050836. PMID: 35624700; PMCID: PMC9137787. <a href="#">Kumar et al. (2022)</a> . Proteomic dissection of rice cytoskeleton reveals the dominance of microtubule and microfilament proteins, and novel components in the cytoskeleton-bound polysome, <i>Plant Physiology and Biochemistry</i> , Volume 170,2022,Pages 75-86,ISSN 0981-9428, <a href="https://doi.org/10.1016/j.plaphy.2021.11.037">https://doi.org/10.1016/j.plaphy.2021.11.037</a> . <a href="#">Pavlovic &amp; Kocab. (2021)</a> Alternative oxidase (AOX) in the carnivorous pitcher plants of the genus <i>Nepenthes</i> : what is it good for? <i>Ann Bot.</i> 2021 Dec 18;mcab151. doi: 10.1093/aob/mcab151. Epub ahead of print. PMID: 34922341. <a href="#">Makino et al. (2020)</a> . Induction of Terminal Oxidases of Electron Transport Chain in Broccoli Heads Under Controlled Atmosphere Storage. <i>Foods</i> , 9 (4) <a href="#">Wang et al. (2020)</a> Rerouting of ribosomal proteins into splicing in plant organelles. <i>BioRxiv</i> , DOI: 10.1101/2020.03.03.974766. <a href="#">Lang et al. (2011)</a> . Simultaneous isolation of pure and intact chloroplasts and mitochondria from moss as the basis for sub-cellular proteomics. <i>Plant Cell Rep.</i> 2011 Feb;30(2):205-15.doi: 10.1007/s00299-010-0935-4.



**1.8 µg of total protein** from (1) *Arabidopsis thaliana* leaf, (2) *Plantago major* leaf, (3) *Plantago europophylla* leaf, (4) *Silene dioica* leaf, (5) *Silene uniflora* leaf were separated on **4-12% NuPage (Invitrogen) LDS-PAGE** and blotted 1h to **PVDF**. Primary antibody was used in 1: 1000 dilution. Detection was performed using chemiluminescence, following manufacture's recommendations.