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Product no AS04 053A

COXII | Plant Cytochrome oxidase subunit II (affinity purified)

Product information

Immunogen	KLH-conugated synthetic peptide fully conserved in all available protein sequences from eudicots including *Arabidopsis thaliana* AtmG00160, monocots including *Oryza sativa* P04373 *and Physcomitrella patens* Q1XGA9
Host	Rabbit
Clonality	Polyclonal
Purity	Affinity purified serum
Format	Lyophilized in PBS pH 7.4
Quantity	50 µg
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 tubes briefly prior to opening them to avoid any losses that might occur from lyophilized material adhering to the cap or sides of the tubes.
Additional information	Cellular **[compartment marker]** of mitochondrial inner membrane

Application information

Recommended dilution	1 : 1000 (BN-PAGE), 1 : 1000 (WB)
Expected | apparent MW	29.4 | 30 kDa (for *Arabidopsis thaliana*)
Confirmed reactivity	*Arabidopsis thaliana (leaf extract and isolated mitochondria), Betula nana, Brassica napus, Brassica oleracea, Cicer aretinum, Cucumis melo, Cucumis sativus, Erophorum vaginatum, Hordeum vulgare, Lilium longifolorum, Nicotiana tabacum, Picea abies, Plantago major, Plantago euryphylla, Silene uniflora, Silene dioica, Physcomitrella patens, Triticum aestivum, Triticum durum* Desf. *, Zea mays, Vicia faba, Quercus rubra*
Predicted reactivity	*Cucumis melo, Glycine max, Oryza sativa, Physcomitrella patens, Pisum sativum, Triticum aestivum, Vigna radiata* Species of your interest not listed? Contact us
Not reactive in	*Saccharina japonica*
Additional information	Antibody detects COXII protein most optimally in membrane fractions. The signal is weak in a in 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. For high resolution images, please visit the specific product page at www.agrisera.com
Selected references	Makino et al. (2020). Induction of Terminal Oxidases of Electron Transport Chain in Broccoli Heads Under Controlled Atmosphere Storage. Foods, 9 (4) Wang et al. (2020) Rerouting of ribosomal proteins into splicing in plant organelles. BioRxiv, DOI: 10.1101/2020.03.03.974766 . Barua et al. (2019). Dehydration-responsive nuclear proteome landscape of chickpea (Cicer arietinum L.) reveals phosphorylation-mediated regulation of stress response. Plant Cell Environ. 2019 Jan;42(1):230-244. doi: 10.1111/pce.13334. Waltz et al. (2019). Small is big in Arabidopsis mitochondrial ribosome. Nat Plants. 2019 Jan;5(1):106-117. doi: 10.1038/s41477-018-0339-y. Shull et al. (2019). Anatase TiO2 nanoparticles induce autophagy and chloroplast degradation in thale cress (Arabidopsis thaliana). Environ Sci Technol. 2019 Jul 29. doi: 10.1021/acs.est.9b01648. Wang et al. (2019). SMALL KERNEL4 is required for mitochondrial cox1 transcript editing and seed development in maize. J Integr Plant Biol. 2019 Jul 23. doi: 10.1111/jipb.12856. Chen et al. (2019). PPR-SMR1 is required for the splicing of multiple mitochondrial introns and interacts with Zm-mCSF1 and is essential for seed development in maize. J Exp Bot. 2019 Jun 28. pii: erz305. doi: 10.1093/jxb/erz305. Waltz et al. (2019). Small is big in Arabidopsis mitochondrial ribosome. Nat Plants. 2019 Jan;5(1):106-117. doi: 10.1038/s41477-018-0339-y. Gayen et al. (2018). Dehydration-induced proteomic landscape of mitochondria in chickpea reveals large-scale coordination of key biological processes. J Proteomics. 2018 Sep 19. pii: S1874-3919(18)30349-X. doi: 10.1016/j.jprot.2018.09.008 Barua et al. (2018). Dehydration-responsive nuclear proteome landscape of chickpea (Cicer arietinum L.) reveals phosphorylation-mediated regulation of stress response. Plant Cell Environ. 2018 May 10. doi: 10.1111/pce.13334. Migocka et al. (2018). Cucumber metal tolerance protein 7 (CsMTP7) is involved in the accumulation of Fe in mitochondria under Fe excess. Plant J. 2018 Jun 22. doi: 10.1111/tpj.14006.

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