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Product no AS16 3692 DISCONTINUED Anti-PTOX | Plastid terminal oxidase

Product information

ImmunogenPart of Arabidopsis thaliana recombinant plastid terminal oxidase, TAIR: At4g22260, UniProt: Q56X52HostRabbitClonalityPolyclonalPuritySerumFormatLyophilizedQuantity100 μlReconstitutionFor reconstitution add 100 μl of sterile waterStorageStora 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 informationThis product can be sold containing proclin if requestedRecommended dilution1 : 4000 (WB)Expected | apparent30.137-41 kDa (Arabidopsis thaliana)

Expected apparent MW	30 37-41 kDa (Arabidopsis thaliana)
Confirmed reactivity	Arabidopsis thaliana, Chlamydomonas reinhardtii, Hordeum vulgare, Nicotiana tabacum, Solanum lycopersicum, Spinacia oleracea
Predicted reactivity	Higher plants Species of your interest not listed? <u>Contact us</u>
Not reactive in	Galdieria sulphuraria, Phaeodactylum tricornutum
Additional information	In most plants it is a minor polypeptide and consequently enrichment by analyzing membrane fractions for example is recommended
Selected references	Urban, Rogowski & Romanowska (2022), Crucial role of the PTOX and CET pathways in optimizing ATP synthesis in mesophyll chloroplasts of C3 and C4 plants, Environmental and Experimental Botany, Volume 202, October 2022, 105024, https://doi.org/10.1016/j.envexpbot.2022.105024 Pralon et al. (2020). Mutation of the Atypical Kinase ABC1K3 Partially Rescues the PROTON GRADIENT REGULATION 6 Phenotype in Arabidopsis thaliana. Front. Plant Sci., 25 March 2020 Bolte et al. (2020). Dynamics of the localization of the plastid terminal oxidase PTOX inside the chloroplast. J Exp Bot. 2020 Feb 15. pii: eraa074. doi: 10.1093/jxb/eraa074. Cournac et al. (2000b). Flexibility in photosynthetic electron transport: a newly identified chloroplast oxidase involved in chlororespiration. Philos Trans R Soc Lond B Biol Sci. 2000 Oct 29;355(1402):1447-54 Cournac et al. (2000a). Electron flow between photosystem II and oxygen in chloroplasts of photosystem I-deficient algae is mediated by a quinol oxidase involved in chlororespiration. J Biol Chem. 2000 Jun 9;275(23):17256-62.

Application example



¹ ² ³ ⁴ ⁵ ⁶ 15 μg from total protein leaf extract of *Spinacia oleracea* (1), *Arabidopsis thliana* (2), *Solanum lycopersicum* (3), *Nicotiana tabacum* (4), *Hordeum vulgare* (5), *Arabidopsis thaliana* thylakoid fraction (6) were separated on SDS-PAGE and blotted to PVDF membrane. Incubation with primary antibody: 1: 4000 followed by chemiluminescent detection. Exposure time 2 minutes.

Cross reactivity to 52 kDa band can be eliminated by using thylakoid fraction or blocking with 10 % milk ON/4°C.