

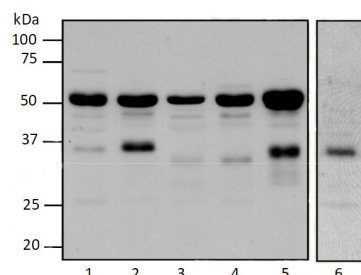
Product no **AS16 3692****PTOX | Plastid terminal oxidase****Product information**

<b>Immunogen</b>	Part of <i>Arabidopsis thaliana</i> recombinant plastid terminal oxidase, TAIR: <a href="#">At4g22260</a> , UniProt: <a href="#">Q56X52</a>
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Purity</b>	Serum
<b>Format</b>	Lyophilized
<b>Quantity</b>	100 µl
<b>Reconstitution</b>	For reconstitution add 100 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.

**Additional information** | This product can be sold containing proclin if requested

**Application information**

<b>Recommended dilution</b>	1 : 4000 (WB)
<b>Expected   apparent MW</b>	30   37-41 kDa ( <i>Arabidopsis thaliana</i> )
<b>Confirmed reactivity</b>	<i>Arabidopsis thaliana</i> , <i>Chlamydomonas reinhardtii</i> , <i>Hordeum vulgare</i> , <i>Nicotiana tabacum</i> , <i>Solanum lycopersicum</i> , <i>Spinacia oleracea</i>
<b>Predicted reactivity</b>	Higher plants Species of your interest not listed? <a href="#">Contact us</a>
<b>Not reactive in</b>	<i>Galdieria sulphuraria</i> , <i>Phaeodactylum tricorutum</i>
<b>Additional information</b>	In most plants it is a minor polypeptide and consequently enrichment by analyzing membrane fractions for example is recommended
<b>Selected references</b>	<a href="#">Urban</a> , 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, <a href="https://doi.org/10.1016/j.envexpbot.2022.105024">https://doi.org/10.1016/j.envexpbot.2022.105024</a> <a href="#">Pralon</a> 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 <a href="#">Bolte</a> 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. <a href="#">Cournac</a> 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 <a href="#">Cournac</a> 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**

15 µg from total protein leaf extract of *Spinacia oleracea* (1), *Arabidopsis thaliana* (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.