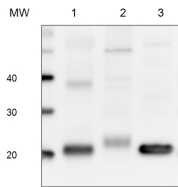


Product no **AS08 330****Anti-PetC | Rieske iron-sulfur protein of Cyt b6/f complex****Product information**

<b>Immunogen</b>	KLH-conjugated synthetic peptide which shows strong conservation across higher plants including <i>Arabidopsis thaliana</i> UniProt:Q9ZR03, TAIR:At4g03280, <i>Chlamydomonas reinhardtii</i> P49728 and <i>Synechococcus</i> sp. Q5N5B0
<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.

**Additional information** | This product can be sold containing Proclin if requested.**Application information**

<b>Recommended dilution</b>	1 : 5000-1 : 10 000 (BN-PAGE), (WB)
<b>Expected   apparent MW</b>	23 kDa
<b>Confirmed reactivity</b>	<i>Arabidopsis thaliana</i> , <i>Brassica rapa</i> subsp. chinensis, <i>Chlamydomonas reinhardtii</i> , <i>Echinola crus-galli</i> , <i>Euglena</i> sp., <i>Haematococcus pluvialis</i> , <i>Nicotiana tabacum</i> , <i>Panicum miliaceum</i> , <i>Pisum sativum</i> , <i>Setaria viridis</i> , <i>Spinacia oleracea</i> , <i>Synechococcus</i> PCC 7942, <i>Synechocystis</i> sp. PCC 6803, <i>Thalassiosira guillardii</i> , <i>Zea mays</i>
<b>Predicted reactivity</b>	<i>Acetabularia acetabulum</i> , <i>Brachypodium distachyon</i> , <i>cyanobacteria</i> , <i>Calothrix</i> sp. PCC 7507, <i>Catalpa bungei</i> , <i>Cicer arietinum</i> , <i>Crocospaera watsonii</i> , <i>Cynodon dactylon</i> , <i>Gossypium raimondii</i> , <i>Hordeum vulgare</i> , <i>Lyngbya aestuarii</i> , <i>Microcystis aeruginosa</i> , <i>Nannochloropsis gaditana</i> , <i>Nicotiana benthamiana</i> , <i>Pisum sativum</i> , <i>Ricinus communis</i> , <i>Saccharum hybrid cultivar ROC22</i> , <i>Selaginella moellendorffii</i> , <i>Solanum tuberosum</i> , <i>Sorghum bicolor</i> , <i>Oryza sativa</i> , <i>Physcomitrium patens</i> , <i>Phormidesmis priestleyi</i> , <i>Populus trichocarpa</i> , <i>Sonneratia alba</i> , <i>Triticum aestivum</i> , <i>Zostera marina</i> , <i>Vitis vinifera</i>
	Species of your interest not listed? <a href="#">Contact us</a>
<b>Not reactive in</b>	<i>Candidia albicans</i>
<b>Selected references</b>	<a href="#">Collombat et al. (2025)</a> . Arabidopsis conditional photosynthesis mutants abc1k1 and var2 accumulate partially processed thylakoid preproteins and are defective in chloroplast biogenesis. Commun Biol. 2025 Jan 22;8(1):111. doi: 10.1038/s42003-025-07497-y. <a href="#">Penzler et al. (2024)</a> . A pgr5 suppressor screen uncovers two distinct suppression mechanisms and links cytochrome b6f complex stability to PGR5. Plant Cell. 2024 Mar 27:koae098. doi: 10.1093/plcell/koae098. <a href="#">Ermakova et al. (2024)</a> . Chloroplast NADH dehydrogenase-like complex-mediated cyclic electron flow is the main electron transport route in C4 bundle sheath cells. New Phytol. 2024 Jul 22. doi: 10.1111/nph.19982. <a href="#">Dai et al. (2023)</a> . Hypothetical chloroplast reading frame 51 encodes a photosystem I assembly factor in cyanobacteria. Plant Cell. 2023 Dec 26:koad330. doi: 10.1093/plcell/koad330. <a href="#">Pipitone et al. (2021)</a> . A multifaceted analysis reveals two distinct phases of chloroplast biogenesis during de-etiolation in Arabidopsis. Elife. 2021 Feb 25;10:e62709. doi: 10.7554/eLife.62709. PMID: 33629953; PMCID: PMC7906606. <a href="#">Kana et al. (2020)</a> . Fast Diffusion of the Unassembled PetC1-GFP Protein in the Cyanobacterial Thylakoid Membrane. Life (Basel). 2020 Dec 29;11(1):E15. doi: 10.3390/life11010015. PMID: 33383642. <a href="#">Zhang et al. (2020)</a> . Enhanced Relative Electron Transport Rate Contributes To Increased Photosynthetic Capacity In Autotetraploid Pak Choi. Plant Cell Physiol. 2020 Jan 6. pii: pcz238. doi: 10.1093/pcp/pcz238. <a href="#">Pralon et al. (2019)</a> . Plastoquinone homeostasis by Arabidopsis proton gradient regulation 6 is essential for photosynthetic efficiency. Commun Biol. 2019 Jun 20;2:220. doi: 10.1038/s42003-019-0477-4. <a href="#">Koochak et al. (2019)</a> . The structural and functional domains of plant thylakoid membranes. Plant J. 2019 Feb;97(3):412-429. doi: 10.1111/tbj.14127.



**5 µg of total protein** from (1) *Arabidopsis thaliana* leaf extracted with **Protein Extraction Buffer**, PEB (**AS08 300**), (2) *Euglena sp.* extracted with PEB, (3) *Synechococcus elongatus* whole cell extracted with PEB, were separated on **4-12% NuPage** (Invitrogen) **LDS-PAGE** and blotted 1h to **PVDF**. Blots were blocked immediately following transfer in 2% blocking reagent 0.1% (v/v) Tween-20 (TBS-T) for 1h/RT with agitation. Blots were incubated in the primary antibody at a dilution of 1: 10 000 for 1h at room temperature with agitation. The antibody solution was decanted and the blot was rinsed briefly twice, then washed once for 15 min and 3 times for 5 min in TBS-T at room temperature with agitation. Blots were incubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated) diluted to 1:50 000 for 1h/RT with agitation. The blots were washed as above and developed for 5 min with chemiluminescence detection reagent according to the manufacturer's instructions. Images of the blots were obtained using a CCD imager (FluorSMax, Bio-Rad) and Quantity One software (Bio-Rad).