

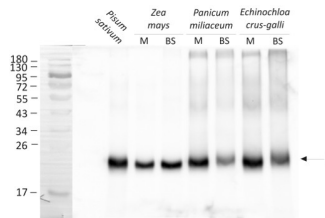
Product no **AS18 4169****Cyt b6 / PetB | Thylakoid membrane cytochrome b6 protein, N terminal****Product information**

<b>Immunogen</b>	KLH-conjugated peptide chosen from <i>Arabidopsis thaliana</i> PetB protein sequence, UniProt: <a href="#">P56773</a> , TAIR: <a href="#">ATCG00720</a>
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Purity</b>	Serum
<b>Format</b>	Lyophilized
<b>Quantity</b>	50 µg
<b>Reconstitution</b>	For reconstitution add 50 µl, of sterile water
<b>Storage</b>	Lyophilized antibody can be stored at -20 °C for up to 3 years. Re-constituted antibody can be stored at 4 °C for several days to weeks. 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.

**Application information**

<b>Recommended dilution</b>	1 : 1000 - 1 : 5000 (WB)
<b>Expected   apparent MW</b>	24 kDa
<b>Confirmed reactivity</b>	<i>Arabidopsis thaliana</i> , <i>Chlamydomonas reinhardtii</i> , <i>Echinochloa crus-galli</i> , <i>Medicago sativa</i> , <i>Nannochloropsis oceanica</i> strain IMET1, <i>Nicotiana benthamiana</i> , <i>Panicum miliaceum</i> , <i>Pisum sativum</i> , <i>Zea mays</i>
<b>Predicted reactivity</b>	<i>Acacia prainii</i> , <i>Angelphytum bahiense</i> , <i>Aristolochia promissa</i> , <i>Daucus glochidiatus</i> , <i>Dimerostemma brasilianum</i> , <i>Elaphandra paucipunctata</i> , <i>Fraxinus chiisanensis</i> , <i>Gossypium populifolium</i> , <i>Hydrangea heteromalla</i> , <i>Nicotiana sylvestris</i> , <i>Oryza sativa</i> , <i>Salix tetrasperma</i> , <i>Solanum lycopersicum</i> , <i>Thottea siliquosa</i> , <i>Triticum turgidum</i> , <i>Ulva flexuosa</i> , <i>Wedelia biflora</i> , <i>Vanilla aphylla</i> Species of your interest is not listed? Species of your interest not listed? <a href="#">Contact us</a> .
	Species of your interest not listed? <a href="#">Contact us</a>
<b>Selected references</b>	<a href="#">Sulli et al. (2023)</a> . Generation and physiological characterization of genome edited <i>Nicotiana benthamiana</i> plants containing zeaxanthin as the only leaf xanthophyll. <i>Planta</i> . 2023 Oct 5;258(5):93. doi: 10.1007/s00425-023-04248-3. <a href="#">Zhang et al. (2023)</a> . <i>Bupleurum chinense</i> and <i>Medicago sativa</i> sustain their growth in agrophotovoltaic systems by regulating photosynthetic mechanisms. <i>Renewable and Sustainable Energy Reviews</i> Volume 189, Part B, January 2024, 114024. <a href="#">Nagy et al. (2023)</a> . Photoautotrophic and sustained H <sub>2</sub> production by the pgr5 mutant of <i>Chlamydomonas reinhardtii</i> in simulated daily light conditions. <i>International Journal of Hydrogen Energy</i> Volume 53, 31 January 2024, Pages 760-769. <a href="#">Urban, Rogowski &amp; Romanowska (2022)</a> , Crucial role of the PTOX and CET pathways in optimizing ATP synthesis in mesophyll chloroplasts of C3 and C4 plants, <i>Environmental and Experimental Botany</i> , Volume 202, October 2022, 105024, <a href="https://doi.org/10.1016/j.envexpbot.2022.105027">https://doi.org/10.1016/j.envexpbot.2022.105027</a> <a href="#">Wada et al. (2021)</a> Identification of a Novel Mutation Exacerbated the PSI Photoinhibition in pgr5/pgr1 Mutants; Caution for Overestimation of the Phenotypes in <i>Arabidopsis pgr5-1</i> Mutant. <i>Cells</i> . 2021 Oct 26;10(11):2884. doi: 10.3390/cells10112884. PMID: 34831107; PMCID: PMC8616342. <a href="#">Chen et al. (2021)</a> Degradation of the photosystem II core complex is independent of chlorophyll degradation mediated by Stay-Green Mg <sup>2+</sup> dechelataase in <i>Arabidopsis</i> , <i>Plant Science</i> , Volume 307, 2021, 110902, ISSN 0168-9452, <a href="https://doi.org/10.1016/j.plantsci.2021.110902">https://doi.org/10.1016/j.plantsci.2021.110902</a> . <a href="#">Lu et al. (2021)</a> . Role of an ancient light-harvesting protein of PSI in light absorption and photoprotection. <i>Nat Commun</i> . 2021 Jan 29;12(1):679. doi: 10.1038/s41467-021-20967-1. PMID: 33514722; PMCID: PMC7846763. <a href="#">Wang et al. (2020)</a> . Post-translational coordination of chlorophyll biosynthesis and breakdown by BCMs maintains chlorophyll homeostasis during leaf development. <i>Nat Commun</i> . 2020; 11: 1254.

## Application example



0.75  $\mu\text{g}$  of chlorophyll from *Pisum sativum* thylakoids and from mesophyll (M) and bundle sheath (BS) thylakoids of *Zea mays*, *Panicum miliaceum*, *Echinochloa crus-galli* extracted with 0.4 M sorbitol, 50 mM Hepes NaOH, pH 7.8, 10 mM NaCl, 5 mM  $\text{MgCl}_2$  and 2 mM EDTA were loaded to lanes. Samples were denatured with Laemmli buffer at 75 °C for 5 min and were separated on 12% SDS-PAGE and blotted 30 min to PVDF using wet transfer. Blot was blocked with 5% milk for 2h at room temperature (RT) with agitation. Blot was incubated in the primary antibody a dilution of 1:1000 overnight at 4 °C with agitation in 1% milk in TBS-T. The antibody solution was decanted and the blot was washed 4 times for 5 min in TBS-T at RT with agitation. Blot was incubated in secondary antibody (anti-rabbit IgG HRP conjugated, from Agrisera, [AS09602](#)) diluted to 1:25 000 in 1 % milk in TBS-T for 1h at RT with agitation. The blot was washed 5 times for 5 min in TBS-T and 2 times for 5 min in TBS, and developed for 1 min with 1.25 mM luminol, 0.198 mM coumaric acid and 0.009%  $\text{H}_2\text{O}_2$  in 0.1 M Tris- HCl, pH 8.5. Exposure time in ChemiDoc System was 54 seconds.

Courtesy Dr. Wioleta Wasilewska-Dębowska, Warsaw University, Poland