

Product no **AS06 151****COXIIb | Algal Cytochrome oxidase subunit II b****Product information**

Immunogen | GST fusion with the aminoacids 4-153 of the subunit 2b of the *Chlamydomonas reinhardtii* cytochrome oxidase, UniProt: [Q9AU05](#)

Host | Rabbit

Clonality | Polyclonal

Purity | Serum

Format | Lyophilized

Quantity | 50 µl

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 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 | Cellular [compartment marker] of mitochondrial inner membrane for *Chlamydomonas reinhardtii*

This product can be sold containing ProClin if requested.

Application information

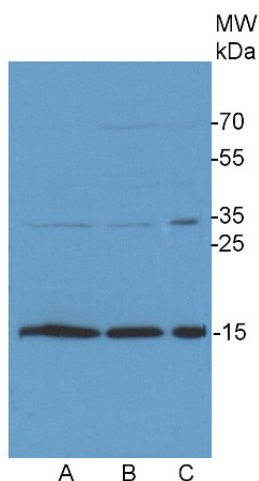
Recommended dilution | 1 : 5000-1 : 25 000 (WB)

Expected | apparent MW | 15 kDa

Confirmed reactivity | *Chlamydomonas reinhardtii*

Not reactive in | *Porphyridium purpureum*

Selected references | [Burlacot et al. \(2022\)](#) Alternative photosynthesis pathways drive the algal CO₂-concentrating mechanism. *Nature* 605, 366–371 (2022). <https://doi.org/10.1038/s41586-022-04662-9>
[Ma et al. \(2020\)](#). An ortholog of the Vasa intronic gene is required for small RNA-mediated translation repression in *Chlamydomonas reinhardtii*. *Proc Natl Acad Sci U S A*. 2020 Jan 7;117(1):761-770. doi: 10.1073/pnas.1908356117.
[Jokei et al. \(2020\)](#). Elimination of the flavodiiron electron sink facilitates long-term H₂ photoproduction in green algae. *Biotechnol Biofuels*. 2019 Dec 5;12:280. doi: 10.1186/s13068-019-1618-1.
[Upadhyaya and Jagadeeshwar Rao \(2019\)](#). Reciprocal regulation of photosynthesis and mitochondrial respiration by TOR kinase in *Chlamydomonas reinhardtii*. *Plant Direct* Volume 3, Issue 11.
[Jokei et al. \(2018\)](#). Hunting the main player enabling *Chlamydomonas reinhardtii* growth under fluctuating light. *Plant J*. 2018 Mar 25. doi: 10.1111/tpj.13897.

Application example

Chlamydomonas reinhardtii membrane extract (**A**), *Chlamydomonas reinhardtii* total cell extract, prepared by sonication, loading 14 µl equivalent

to 30 µg of total protein (**B**), *Chlamydomonas reinhardtii* total cell extract, rapid, prepared directly by spinning down the cells and lysis of cell pellet in SDS-PAGE sample buffer and loading 14 µl equivalent to 98 µg of total protein (**C**), denatured at 100°C for 5 min. were separated on 15 % SDS-PAGE and blotted 1h to PVDF using tank transfer. Blots were blocked with 1 % blocking buffer (2 ml blocking reagent stock solution ROCHE 11 520 709 001 in 20 ml TBS) for ON at 4°C without agitation. Blot was incubated in the primary antibody at a dilution of 1: 25 000 for 1h at RT 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 RT with agitation. Blot was incubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated, from Agrisera [AS09602](#)) diluted to 1:20 000 in for 1h at RT with agitation. The blot was washed as above and developed using chemiluminescent detection reagent according to manufacture instructions. Exposure time was 8 seconds.

Courtesy of Nadine Coosemans, Laboratoire de génétique et physiologie des microalgues, Université de Liège, Belgium