

product **AS05 071**

AtpH | ATP synthase subunit c

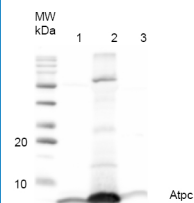
product information

background	F-type ATPase (ATP synthase) is the universal enzyme that synthesizes ATP from ADP and phosphate using the energy stored in a transmembrane ion gradient. Multiple copies of the c subunit build up the ring structure (in spinach a 14-mer of ~112 kDa) of the membrane bound Fo-part of the enzyme.
immunogen	purified c subunit from <i>Spinacia oleracea</i> P69447
antibody format	rabbit; polyclonal; serum; lyophilized
quantity	200µl - for reconstitution add 200 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 tubes briefly prior to opening them to avoid any losses that might occur from lyophilized material adhering to the cap or sides of the tubes.
tested applications	Western blot (WB)
additional information	to be added when available

application information

recommended dilution	1: 1000 - 1: 10 000 with standard ECL (WB)
expected apparent MW	8 kDa (for <i>Arabidopsis thaliana</i>)
confirmed reactivity	<i>Arabidopsis thaliana</i> , <i>Nicotiana benthamina</i> , <i>Spinacia oleracea</i> , <i>Thermosynechococcus elongatus</i>
predicted reactivity	dicots including <i>Glycine max</i> , <i>Pisum sativum</i> , <i>Vitis vinifera</i> , monocots including <i>Oryza sativa</i> , <i>Zea mays</i> , trees: <i>Populus alba</i> , <i>Pinus thunbergii</i> , moss: <i>Physcomitrella patens</i> , green algae
not reactive in	no confirmed exceptions from predicted reactivity known in the moment
additional information	please note that increased incubation at 95°C (20-30 min) prior to loading is recommended to break the multimeric c-mer structure, detection of partial ring structures (e.g. 5 or 6 subunits) may occur
selected references	Lawrence et al. (2010). Recombinant production and purification of the subunit c of chloroplast ATP synthase. Protein Expression and Purification 76: 15-24.

application example



0.7 μg of purified ATP-synthase complex from *Spinacia oleracea* (CF0F1) (1), 15.3 μg of purified ATP-synthase complex (CF0F1) from *Nicotiana benthamiana* (2) and 48.6 μg of *Thermosynechococcus elongatus* thylakoid preparation (3) were separated on 12% polyacrylamide gel and blotted on PVDF membrane. Filters were blocked (0.5h), incubated with 1: 1000 anti-AtpH antibodies (1h), followed by incubation with 1: 5 000 secondary anti-rabbit antibody (1.25h), coupled to HRP and visualized with standard ECL.