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Product no AS16 3930

Anti-FtsH1 + FtsH5 | ATP-dependent zinc metalloprotease FtsH1 + FtsH5 (chloroplastic)

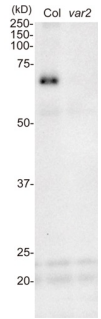
Product information

Immunogen	Recombinant *Arabidopsis thaliana* FtsH5, UniProt: O80860; TAIR: At5g42270
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.

Application information

Recommended dilution	1 : 5000 (WB)
Expected | apparent MW	67.1 kD (*Arabidopsis thaliana*)
Confirmed reactivity	*Arabidopsis thaliana, Nicotiana tabacum, Spinacia oleracea*
Predicted reactivity	Species of your interest not listed? Contact us
Not reactive in	*Chlamydomonas reinhardtii*
Additional information	Both FtsH5 (VAR1) and FtsH1 ahare high degree of homology therefore this antibody recognizes both proteins
Selected references	Zhao et al. (2024). Psb28 protein is indispensable for stable accumulation of PSII core complexes in Arabidopsis.Plant J. 2024 May 26. doi: 10.1111/tpj.16844.

Application example



Total proteins were isolated from Arabidopsis (*Arabidopsis thaliana*) wild type (Col) and mutant lacking FtsH2 (*yellow variegated2* [*var2*]). Samples were immediately frozen in liquid nitrogen and pulverized with a microtube homogenizer. Proteins were extracted by adding appropriate extraction buffer. After measurement of chlorophyll concentration, equally loaded supernatants (based on chlorophyll [0.5 µg chlorophyll/lane]) were subjected to SDS-PAGE analysis. Proteins were separated on 12% SDS-PAGE gel and blotted 1h to PVDF membrane. Blots were blocked in 1% BSA in PBST buffer for 1 h at room temperature. Then, blots were incubated in the primary antibody (anti-VAR1) at a dilution of 1:5000 for 1 h. After washing 2 times for 10 min in PBST buffer, blots were incubated in the secondary antibody (anti Rabbit IgG) at a dilution of 1:5000 for 1 h. Blots were washed 2 times for 10 min in PBST buffer. Chemiluminescent detection reagent was used for signal detection. Images of the blots were obtained using ChemiDoc™ XRS (Bio-rad). Exposure time was 2 seconds.
Absence of FtsH2 in *var2* mutant results in decreased amount of FtsH1 which together form a hetero-hexamer complex.

Courtesy of Dr. Yusuke Kato, Plant Light Acclimation Research Group, Okayama University, Japan