

Product no **AS16 3929****Anti-FtsH2 + FtsH8 | ATP-dependent zinc metalloprotease FtsH2 + FtsH8 (chloroplastic)****Product information**

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| <b>Immunogen</b> | Recombinant <i>Arabidopsis thaliana</i> FtsH2, UniProt: <a href="#">O80860</a> ; TAIR: <a href="#">At2g30950</a>  |
| <b>Host</b>      | Rabbit  |
| <b>Clonality</b> | Polyclonal  |
| <b>Purity</b>    | Serum   |
| <b>Format</b>    | Lyophilized   |
| <b>Quantity</b>  | 50 µl   |
| <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. |

**Application information**

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| <b>Recommended dilution</b>   | 1: 5000 (WB)   |
| <b>Expected   apparent MW</b> | 65.6 kD ( <i>Arabidopsis thaliana</i> )  |
| <b>Confirmed reactivity</b>   | <i>Arabidopsis thaliana</i> , <i>Nicotiana tabacum</i> , <i>Spinacia oleracea</i>  |
| <b>Predicted reactivity</b>   | Species of your interest not listed? <a href="#">Contact us</a>  |
| <b>Not reactive in</b>        | <i>Chlamydomonas reinhardtii</i>   |
| <b>Additional information</b> | Both FtsH2 (VAR2) and FtsH8 share high degree of homology therefore this antibody recognizes both proteins   |
| <b>Selected references</b>    | <a href="#">Zhao et al. (2024)</a> . 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 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. Proteins were extracted by adding appropriate extraction buffer. After measurement of chlorophyll concentration, equally loaded supernatants (based on chlorophyll [0.5 µg chlorophyll/lane]). 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-VAR2) 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. Detected signal in *var2* mutant is attributed to high homology of FtsH2 with FtsH8 (another type-B subunit).

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