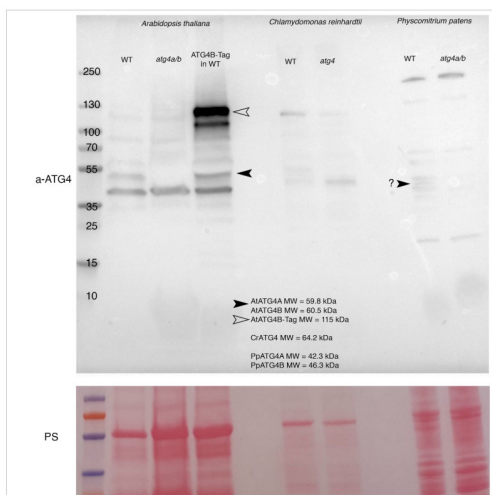


Product no **AS24 5057****Anti-ATG4 | Autophagy protein 4 isoform (plant)****Product information**

<b>Immunogen</b>	Part of recombinant ATG4 protein of <i>Arabidopsis thaliana</i> ATG4a UniProt: <a href="#">Q8S929</a> GeneID: At2g44140 and ATG4b UniProt: <a href="#">Q9M1Y0</a> GeneID: AT3G59950
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Purity</b>	Antigen affinity purified serum, in PBS pH 7.4
<b>Format</b>	Lyophilized
<b>Quantity</b>	50 µg
<b>Reconstitution</b>	For reconstitution, add 50 µl of sterile or deionized water.
<b>Storage</b>	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.

**Application information****Recommended dilution** | 1 : 1500 (WB)**Expected | apparent MW** | 52.5 kDa, 51 kDa**Confirmed reactivity** | *Arabidopsis thaliana***Predicted reactivity** | *Brassica napus*, *Hordeum vulgare*, *Nicotiana tabacum*, *Oryza sativa*, *Pisum sativum*, *Solanum lycopersicum*, *Solanum tuberosum*, *Pisum sativum*, *Zea mays*Species of your interest not listed? [Contact us](#)**Not reactive in** | *Chlamydomonas reinhardtii*, *Physcomitrium patens***Selected references** | To be added when available. Antibody released in March 2026.

MW of ATG4 in analysed samples:

AtATG4A MW = 59.8 kDa (*Arabidopsis thaliana*)AtATG4B MW = 60.5 kDa (*Arabidopsis thaliana*)AtATG4B-Tag MW = 115 kDa (*Arabidopsis thaliana*)CrATG4 MW = 64.2 kDa (*Chlamydomonas reinhardtii*) negative controlPpATG4A MW = 42.3 kDa (*Physcomitrium patens*) negative controlPpATG4B MW = 46.3 kDa (*Physcomitrium patens*) negative control20-50 µg/well of total protein extracted freshly from true leaves of 4-week-old *A. thaliana* plants. Used backgrounds were wild type Col-0, atg4a-2/b-2 (Zou et al, 2025. Nat Comms. <https://doi.org/10.1038/>) and wild-type over-expressing tagged ATG4B (recently established in my

group, not published).

10 ug/well of total protein extracted from whole cells of *Chlamydomonas reinhardtii* at the log phase of growth. Wild-type and atg4KO lines were used for protein extraction (Zou et al, 2025.Nat Comms. <https://doi.org/10.1038/>)

20 ug/well of total protein freshly extracted from leafy tissue of *Physcomitrium patens* of the wild-type and atg4a/b knockout backgrounds (recently established in my group, not published). Plant material was flash frozen in liquid N<sub>2</sub>, powdered and mixed 1:1 with 2xLaemmli buffer. Samples were boiled at 90 °C for 5 minutes, spun down at 17000g for 5 minutes-> supernatants were stored at -20 °C at preheated at 95 °C for 1 minute before loading on the gel Samples were separated in the cold on precast TGX, StainFree Bio-Rad 4-20% SDS-PAGE and blotted for 7.5 minutes to PVDF using Bio-Rad premade cassettes and Turbo program for semi-dry transfer. Blot was blocked with 5% milk for 15 minutes at RT with agitation. Blot was incubated in the primary antibody at a dilution of 1:500 for 48h at 4 °C. The antibody solution was decanted, and the blot was washed four times for 10 minutes in PBS-T at RT with agitation. Blot was incubated in a-rabbit HRP secondary antibody (AS09 602-trial Goat anti-rabbit HRP conjugated) diluted to 1: 50 000 in 2.5% skim milk for 1 h/RT with agitation. The blot was washed as above and developed with a following chemiluminescent detection reagent: ECL, Bio-Rad. Exposure time was collected in accumulation mode, every second for the period of 100 seconds. After luminescence detection, the membrane was stained with Ponceau S for loading control.

Note: Shorter incubation time with ATG4 antibody will decrease background signal.

Courtesy of Dr. Dr. Alyona Minina, Swedish University of Agricultural Sciences, Sweden