

Agrisera

This product is for research use only (not for diagnostic or therapeutic use)

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product **AS15 2831** **ATG4 | Autophagy protein 4**

product information

Background | **ATG4 (Autophagy protein 4)** is a protein with cyteine-type endopeptidase activity involved in autophagy process.

Immunogen | recombinant ATG4 of *Chlamydomonas reinhardtii*, Gene ID [Cre12.g510100](#)

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 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)

Related products | [AS19 4275](#) | Anti-ATG3 | Autophagy-related protein 3, rabbit antibodies
[AS15 2831](#) | Anti-ATG4 | Autophagy protein 4, rabbit antibodies
[AS19 4276](#) | Anti-ATG5 | Autophagy protein 5, rabbit antibodies
[AS19 4277](#) | Anti-ATG7 | Autophagy-related protein 7, rabbit antibodies

[AS14 2811](#) | Anti-ATG8A | Autophagy-related protein 8a, rabbit antibodies
[AS14 2769PRE](#) | ATG8 | Autophagy-related protein, pre-immune serum

[AS14 2769](#) | Anti-ATG8 | Autophagy-related protein, rabbit antibodies

[AS16 4071](#) | Anti-ATG9 | Autophagy-related protein 9 (N-terminal), rabbit antibodies
[AS16 4072](#) | Anti-ATG9 | Autophagy-related protein 9 (C-terminal), rabbit antibodies

[AS19 4278](#) | Anti-ATG12b | Autophagy-related protein 12b, rabbit antibodies
[AS19 4279](#) | Anti-ATG13a | Autophagy-related protein 13a, rabbit antibodies
[AS19 4280](#) | Anti-ATG16 | Autophagy-related protein 16, rabbit antibodies

[AS14 2805](#) | Anti-NBR1 | Autophagy substrate NBR1, rabbit antibodies
[AS19 4281](#) | Anti-NBR1 | Autophagy substrate NBR1, rabbit antibodies

Additional information | This antibody is recognizing 25 ng of recombinant CrATG4

This product can be sold containing ProClin if requested.

Application information

Recommended dilution | 1 : 5000 (WB)

Expected | apparent MW | 64.2 | 70 kDa

Confirmed reactivity | *Chlamydomonas reinhardtii*

Predicted reactivity | *Coccomyxa subellipsoidea C-169*, *Tetraselmis sp. GSL018*, *Volvox carteri*

Not reactive in | *Arabidopsis thaliana*, *Casium annuum*, *Nicotiana tabacum*

Additional information |

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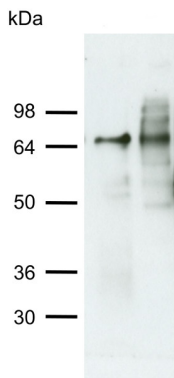
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Technical details how to work with this antibody are provided here: [Pérez-Pérez et al. \(2016\)](#). Control of Autophagy in *Chlamydomonas* Is Mediated through Redox-Dependent Inactivation of the ATG4 Protease. *Plant Physiol.* 2016 Dec;172(4):2219-2234.

Selected references

[Pérez-Pérez et al. \(2016\)](#). Control of Autophagy in *Chlamydomonas* Is Mediated through Redox-Dependent Inactivation of the ATG4 Protease. *Plant Physiol.* 2016 Dec;172(4):2219-2234.
[Chen et al. \(2016\)](#). The role of nitric oxide signalling in response to salt stress in *Chlamydomonas reinhardtii*. *Planta.* 2016 Sep;244(3):651-69. doi: 10.1007/s00425-016-2528-0. Epub 2016 Apr 26.

Application example



10 ng of recombinant, purified *Chlamydomonas reinhardtii* ATG4 (**left**) and 15 µg of *Chlamydomonas reinhardtii* total cell extract (**right**) were separated on 12 % SDS-PAGE and blotted 1h to nitrocellulose membrane using semi-dry transfer. Blots were blocked with 5 % dry milk in PBS for 1h at room temperature (RT) with agitation. Blot was incubated in the primary antibody at a dilution of 1:5000 over night at 4 °C 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, [AS09 602](#), Agrisera) diluted to 1:10000 in 5 % dry milk for 1h at RT with agitation. The blot was washed as above and developed for 5 min with chemiluminescent detection reagent, according to the manufacturer's instructions. Exposure time was 30 seconds

Courtesy of María Esther Pérez-Pérez and Jose L. Crespo, CSIC, Spain