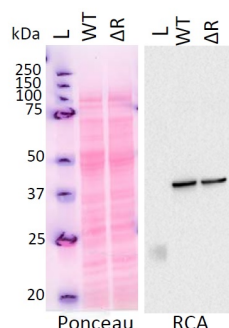


Product no **AS22 4868****Anti-RA | Rubisco activase****Product information**

Immunogen	Purified, recombinant Rubisco activase from <i>Gossypium hirsutum</i> Q9AXG1
Host	Rabbit
Clonality	Polyclonal
Purity	Immunogen affinity purified serum in PBS pH 7.4.
Format	Lyophilized
Quantity	50 µg
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.

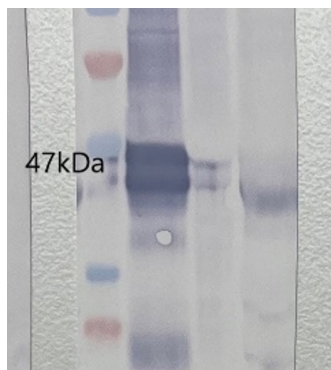
Application information

Recommended dilution	1: 100 (IF), 1: 5000 (WB)
Expected apparent MW	47 and 42 kDa (maize, tobacco, <i>Chlamydomonas</i>)
Confirmed reactivity	<i>Arabidopsis thaliana</i> , <i>Chlamydomonas reinhardtii</i> , <i>Euglena gracilis</i> , <i>Hordeum vulgare</i>
Predicted reactivity	<i>Camelina sativa</i> , <i>Caesalpinia pulcherrima</i> , <i>Glycine max</i> , <i>Gossypium mexicanum</i> , <i>Hordeum spontaneum</i> , <i>Festuca pratensis</i> , <i>Glycine max</i> , <i>Gossypium hirsutum</i> , <i>Gossypium barbadense</i> , <i>Lolium perenne</i> , <i>Medicago sativa</i> , <i>Nannochloropsis oceanica</i> , <i>Nicotiana tabacum</i> , <i>Oryza sativa</i> , <i>Olea europea</i> , <i>Picea sitchensis</i> , <i>Physcomitrium patens</i> , <i>Populus balsamifera</i> , <i>Ricinus communis</i> , <i>Solanum lycopersicum</i> , <i>Spinacia oleracea</i> , <i>Triticum aestivum</i> , <i>Rhoeo discolor</i> , <i>Solanum lycopersicum</i> , <i>Thellungiella salsuginea</i> , red sulfur bacterium <i>Thiodictyon</i> sp. <i>Cad16</i> (isolated from Lake Cadagno), <i>Zea mays</i> , <i>Vitis vinifera</i>
	Species of your interest not listed? Contact us
Not reactive in	marine picocyanobacteria
Additional information	There are two forms of activase (alpha and beta) in some species (for example <i>Arabidopsis</i> , <i>Camelina</i> , <i>spinach</i> , <i>rice</i>) and only one form in other species (<i>tobacco</i> , <i>maize</i> , <i>Chlamydomonas</i>). Alpha is about 46-47 kDa, beta is about 42 kDa. Species that have only one form have the beta form.
Selected references	To be added when available. Product released in September 2024, as a replacement of AS10 700.



4 µg/well of total protein extracted from exponentially grown *Chlamydomonas reinhardtii*. Exact buffer components were: 0.1M Na₂CO₃, 0.1M DTT and denatured with 2% SDS-5% Sucrose at 100 °C/1 min. Samples were separated on 8-16% SDS-PAGE and blotted for 1 h to nitrocellulose (pore size of 0.1 µm), using: semi-dry transfer at RT. Blot was blocked with 5 % milk for 1h/RT with agitation. Blot was incubated in the primary antibody at a dilution of 1: 5000 in TBS-T for ON/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 matching secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated, [AS09 602](#)) diluted to 1: 25 000 in TBS-T for 1h/RT with agitation. The blot was washed as above and developed with a following chemiluminescent detection reagent: AgriseraBright (Agrisera). Exposure time was respectively 15s and 40s.

Courtesy of Dr. Katia Wostrickoff, CNRS/Sorbonne, France



Samples from left to right:

- 1 – MW marker
- 2 – 10µg of *Arabidopsis thaliana* whole leaf extract
- 3 – 10µg of *Hordeum vulgare* whole leaf extract
- 4 – 10µg *Chlamydomonas reinhardtii* whole cell extract

10 µg/well of respective cell extract was denatured with Invitrogen LDS sample buffer (4X) at 70°C/5 min. Samples were separated on Invitrogen NuPage Bis-Tris 4-12% SDS-PAGE 45min and blotted for 1 h to Invitrogen PVDF (pore size of 0.45 µm), using: wet transfer. Blot was blocked with 5% milk in TBS-T for: 1h/RT with agitation. Blot was incubated in the primary antibody at a dilution of 1: 1000 for 1h/RT with TBS-T Blocking. The antibody solution was decanted, and the blot was rinsed briefly twice, then washed once for 10 min and 2 times for 5 min in TBS-T at RT with agitation. Blot was incubated in matching secondary antibody (anti-rabbit IgG ALP conjugated, [AS09 607](#) lot 2105) diluted to 1: 5 000 in TBS-T Blocking for 0,5h/RT with agitation. The blot was washed as above and developed with [AS19 BCIP-NBT](#) lot 03068231 for 0.5-3min. Image was captured after 2h.