Agrisera
Part of Thermo Fisher Scientific

This product is **for research use only** (not for diagnostic or therapeutic use) **contact: support@agrisera.com**

Agrisera AB | Box 57 | SE-91121 Vännäs | Sweden | +46 (0)935 33 000 | www.agrisera.com

Product no AS23 4889

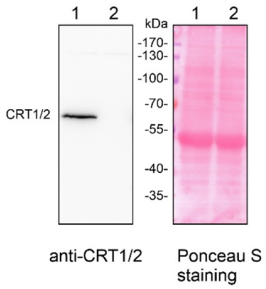
Anti-CRT1/2 | Calreticulin-1/2

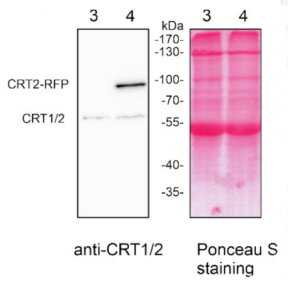
Product information

Immunogen	KLH-conjugated peptide derived from *Arabidopsis thaliana* CRT1: UniProt: Q04151 TAIR: AT1G09210 and CRT2, UniProt: Q38858 TAIR: At1g56340
Host	Rabbit
Clonality	Polyclonal
Purity	Antigern affinity purified serum, in PBS pH 7.4
Format	Lyophilized
Quantity	50 µg
Reconstitution	For reconstitution add 50µl of sterile or deionized 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.

Application information

Recommended dilution	1 : 1000 (WB)
Expected | apparent MW	46 | 53 kDa for CRT1, depending upon the signal peptide cleavage and N-glycosylation 46 | 50 kDa for CRT2, depending upon the signal peptide cleavage and N-glycosylation
Confirmed reactivity	*Arabidopsis thaliana, Petunia hybrida*
Predicted reactivity	*Brassica napus, Solanum lycopersicum, Solanum tuberosum, Nicotiana tabacum* Species of your interest not listed? Contact us
Not reactive in	No confirmed exceptions from predicted reactivity are currently known
Additional information	Apparent MW of CRT is slightly higher than expected, due to *Arabidopsis* CRTs being N-glycosylated. According to Jin et al. 2009, CRT1 and CRT2 are both expressed in seedlings and can be distinguished as 2 separate bands by their migration upon SDS-PAGE and immunoblotting with CRT1 having a higher MW than CRT2. The data with infiltrated *N. benthamiana* show that CRT2 is recognized by anti-CRT1/CRT2. Presumably, the band in *A. thaliana* Col-0 wild-type is therefore also CRT2 and CRT1 is not or weakly recognized. The CRT1/CRT2 antibody does not react with Arabidopsis CRT3 expressed in N. benthamiana (not shown)
Selected references	To be added when available, antibody available in August 2025.





Agrisera AB | Box 57 | SE-91121 Vännäs | Sweden | +46 (0)935 33 000 | www.agrisera.com

Samples:
1 – 50 µg of *Arabidopsis thaliana* Col-0 wild type seedling extract
2 – 50 µg of *Arabidopsis thaliana* crt1 crt2 mutant seedling extract

3 – 50 µg of *Nicotiana benthamiana* leaf extract (mock infiltrated with empty vector control)
4 – 50 µg of *Nicotiana benthamiana* leaf extract transiently expressing *A. thaliana* CRT2-RFP fusion protein

50 µg/well of total protein extracted freshly from *A. thaliana* seedlings. Exact buffer components were: 1 x PBS supplemented with 1 % (v/v) Triton X-100 and denatured with Laemmli buffer at 95 °C for 5 min. Samples were separated at room temperature by 10 % SDS-PAGE and blotted for 1 h to a nitrocellulose membrane (pore size of 0.45 µm), using wet transfer with a cooling block. The blot was blocked with 5 % (w/v) milk in TBS-T for 1 h/RT with agitation. The blot was incubated in the primary CRT1/2 antibody at a dilution of 1:1000 in TBS-T overnight 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. The blot was incubated in matching secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated) diluted to 1:30000 in TBS-T for 2h/RT with agitation. The blot was washed as above and developed with the following chemiluminescent detection reagent: AgriseraBright. Exposure time was 20 seconds (Fusion FX, Vilber).

Courtesy Dr. Richard Strasser, Department of Applied Genetics and Cell Biology, BOKU, Austria