

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 AS21 4567

Anti-CALS12/PMR4 | Callose synthase 12

Product information

Immunogen KLH-conjugated peptide derived from Arabidopsis thaliana CALS12 protein sequence, UniProt: Q9ZT82, TAIR:

At4g03550

Host Rabbit

Clonality Polyclonal

Purity Antigen affinity purified serum, in PBS pH 7.4

Format Lyophilized

Quantity 50 ug

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.

Application information

Recommended dilution 1:1000 (WB)

Expected | apparent MW 206.9 | 185 kDa

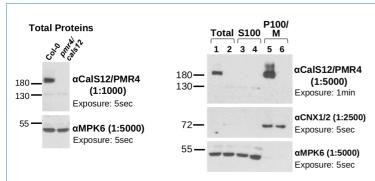
Predicted reactivity | Capsella rubella, Camelina sativa, Eutrema salsugineum, Brassica napus, Brassica oleracea, Brassica rapa, Tarenaya

hassleriana

Species of your interest not listed? Contact us

Not reactive in Nicotiana benthamiana, Solanum tuberosum

Selected references To be added when available, antibody available in September 2022.



Samples:

- 1: Col-0 Total protein extract
- 2: pmr4-1/cals12 Total protein extract
- 3: Col-0 soluble protein fraction (S100)
- 4: pmr4-1/cals12 soluble protein fraction (S100)
- 5: Col-0 microsomal protein fraction (P100/M)
- 6: pmr4-1/cals12 microsomal protein fraction (P100/M)

Total proteins were isolated from 60 *Arabidopsis thaliana* seedlings (10-day-old) of Col-0 (wild- type; lanes 1, 3, 5) and pmr4-1/cals12 null mutant [ref 1] (lanes 2, 4, 6). Using differential centrifugation, the total protein fractions (lanes 1, 2) were separated into soluble proteins (S100; lanes 3, 4) and microsomal proteins (M/P100; lanes 5, 6) as previously published by our lab [ref 2]. Proteins were denatured at 65 °C for 5 min. 30 μ g of proteins were separated on an 8 % SDS-PAGE and transferred for 70 min at 55V using a tank transfer system to nitrocellulose membrane. Blots were blocked with 1x PBS + 0.1 % Tween 20 (PBS-T) + 5% milk for 1 h at room temperature (RT) with agitation. To test primary -CalS12/PMR4 by Agrisera (AS21 4567), different dilutions of the antibody were used as indicated in the figure. Membrane portions probed with -CNX1/2 (AS12 2365, membrane ER) and -MPK6 [ref 1] served as loading controls. Blots were incubated with the primary antibodies overnight at 4 °C with agitation in 1x PBS-T + 5% milk. The primary antibody solutions were decanted, and the blots were washed 4 times (6-8 minutes each) in 1x



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

PBS-T at RT with agitation prior to incubation with secondary antibody Goat anti Rabbit IgG (H&L) –HRP conjugated (<u>AS09 602-trial</u>) diluted to 1: 20,000 in 1x PBS-T + 5% milk for 2 h at RT with agitation. The blots were washed as above and developed for 4 min with chemiluminescent detection reagent ECL Bright (<u>AS16 ECL-N</u>). Exposure time to X-ray films was indicated in figure.

Courtesy of Kelly Mason and Antje Heese; University of Missouri, Div. Biochemistry, IPG (USA)

References

[1] Mason K, Ekanayake G, Heese A (2020). Staining and automated image quantification of callose in Arabidopsis cotyledons and leaves. Methods Cell Biology: Plant Cell Biology 160:181-199.

[2] <u>LaMontagne, E.D., Collins, C.A., Peck, S.C. and Heese, A.</u> 2016. Isolation of microsomal membrane proteins from Arabidopsis thaliana. Curr. Protoc. Plant Biol. 1:217-234. doi: 10.1002/cppb.20020