Agrisera
Part of Olink® Group

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 AS12 2365**

# Anti-CNX1/2 | CALNEXIN HOMOLOG 1/2

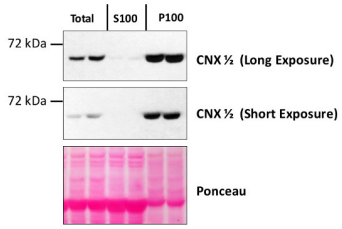
## Product information

| | |
|---|---|
| **Immunogen** | KLH-conjugated synthetic peptide derived from *Arabidopsis thaliana* CNX1 UniProt: P29402 TAIR: AT5G61790, CNX2 UniProt: Q38798, TAIR: AT5G07340. This peptide is NOT present in calreticulins. |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Purity** | Immunogen affinity purified serum in PBS pH 7.4. |
| **Format** | Liquid |
| **Quantity** | 50 µg |
| **Storage** | Aliquite upon arrival to avoid repeated freeze-thaw cycles and store -20°C; 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: 50 (IG), 1 : 2500 (WB) |
| **Expected \| apparent MW** | CNX1 60.5 kD, processing aa 1-20, mature peptide 58.1 kD<br><br>CNX2 60.5/61.4 kD, processing aa 1-25, mature peptides 57.6/58.6 kD |
| **Confirmed reactivity** | *Arabidopsis thaliana, Nicotiana tabacum, Petunia hybrida, Solanum lycopersicum* |
| **Predicted reactivity** | *Brassica napus, Coccomyxa suellipsoidea, Hordeum vulgare, Glycine max, Medicago truncatula, Oryza sativa, Petunia inflata, Physcomitrium patens, Picea sitcHensis, Pisum sativum, Populus trichocarpa, Ricinus communis, Stereum hirsutum, Zea mays, Vitis vinifera*<br>Species of your interest not listed? Contact us |
| **Not reactive in** | *Chlamydomonas reinhardtii* |
| **Additional information** | Antibody can be used as a marker of microsmal membrane |
| **Selected references** | Wasag et al. (2924). Plant-specific calreticulin is localized in the nuclei of highly specialized cells in the pistil—new observations for an old hypothesis. Protoplasma . 2024 Jun 7. doi: 10.1007/s00709-024-01961-y.<br>Skalický et al. (2023). Fluorescence-activated multi-organelle mapping of subcellular plant hormone distribution. Plant J. 2023 Dec;116(6):1825-1841.doi: 10.1111/tpj.16456. Epub 2023 Sep 8.<br>Ekanayake et al. (2021) A. DYNAMIN-RELATED PROTEIN DRP1A functions with DRP2B in plant growth, flg22-immune responses, and endocytosis. Plant Physiol. 2021 Feb 3:kiab024. doi: 10.1093/plphys/kiab024. Epub ahead of print. PMID: 33564884.<br>Ekanayake et al. (2021) A. DYNAMIN-RELATED PROTEIN DRP1A functions with DRP2B in plant growth, flg22-immune responses, and endocytosis. Plant Physiol. 2021 Feb 3:kiab024. doi: 10.1093/plphys/kiab024. Epub ahead of print. PMID: 33564884.<br>Kramer et al. (2020). N6-methyladenosine and RNA secondary structure affect transcript stability and protein abundance during systemic salt stress in Arabidopsis. Plant Direct . 2020 Jul 24;4(7):e00239.doi: 10.1002/pld3.239.<br>Collins et al. (2020). EPSIN1 Modulates the Plasma Membrane Abundance of FLAGELLIN SENSING2 for Effective Immune Responses . Plant Physiol. 2020 Feb 24. pii: pp.01172.2019. doi: 10.1104/pp.19.01172<br>Butler et al. (2019). Soybean resistance locus Rhg1 confers resistance to multiple cyst nematodes in diverse plant species. Phytopathology. 2019 Aug 12. doi: 10.1094/PHYTO-07-19-0225-R. |

**Application example**




Total protein from Col-0 (wild-type) *Arabidopsis thaliana* were extracted with 50mM HEPES-KOH buffer containing 250 mM sucrose, 5% glycerol, 50 mM NaPP, 1 mM NaMo, 25 mM NaF, 10mM EDTA, 0.5% PVP, 3mM DTT, 1mM PMSF, 10uM Leupeptin & 10nM Calyculin, and then fractionated by ultracentrifugation at 100,000 x gravity for 30 min at 4°C into soluble (S100) and microsomal (P100) proteins as described in LaMontagne et al. (2016). Isolation of Microsomal Membrane Proteins from Arabidopsis thaliana. Current Protocols in Plant Biology 1:1-18. doi: 10.1002/cppb.20020. 30 µg proteins of total, S100 and P100 fractions were denatured at 37°C for 5 min, separated on a 7.5 % SDS-PAGE and

blotted 1h to nitrocellulose using tank transfer. Blots were blocked with 1x PBS (from Fisher Scientific BP665-1) + 0.1 %Tween 20 (PBS-T) + 5% milk for 1h at room temperature (RT) with agitation. Blot was incubated in the primary antibody at a dilution of 1: 2500 overnight at 4°C with agitation in 1x PBS-T + 5% milk. The antibody solution was decanted, and the blot was rinsed briefly once, then washed four times for 7 min in 1x PBS-T at RT with agitation. Blot was incubated in secondary antibody (anti-rabbit IgG horse radish peroxidase conjugated) diluted to 1:10 000 in 1x PBS-T + 5% milk for 2 hrs at RT with agitation. The blot was washed as above and developed for 4 min with Amersham ECL (RPN2106). Exposure time was 30 seconds and 2 min

Courtesy of Erica LaMontagne & Dr. Antje Heese (Division of Biochemistry, Interdisciplinary Plant Group (IPG) - University of Missouri; Columbia, MO, USA)