

Anti-CLO3 (Caleosin 3) antibody, rabbit polyclonal

81-107 100 µg

Shipping and Storage: Shipped at 4°C or -20°C and store at -20°C. Do not freeze.

Immunogen: Synthetic peptide (C-VTSQRKVRNDLEETL) corresponding to Caleosin 3 protein (6-31 amino acids) of *Arabidopsis thaliana*.

Form: 2 mg/ml in PBS- with 50% glycerol. Filter-sterilized. No preservative or carrier protein

Purity: IgG fraction purified by protein A affinity from the rabbit antiserum to CLO3.

Reactivity: *Arabidopsis thaliana*. Not tested in other species.

Applications: Western blotting (1/5,000)

Background: Caleosin3 encodes a calcium binding protein whose mRNA is induced upon treatment with NaCl, ABA and in response to desiccation. mRNA expression under drought conditions is apparent particularly in leaves and flowers. Isoform of caleosin with a role as a peroxygenase involved in oxylipin metabolism during biotic and abiotic stress. Involved in the production of 2-hydroxy-octadecatrienoic acid. The peroxygenase has a narrow substrate specificity thus acting as a fatty acid hydroperoxide reductase in vivo. Protective role to fungus pathogen has been indicated. Expression is very low in young leaves and high in senescent leaves.

Subcellular location: Lipid storage body, vacuole, Endoplasmic reticulum, chloroplast

Data Link: UniProtKB-[O22788](#)(PXG3_ARATH)

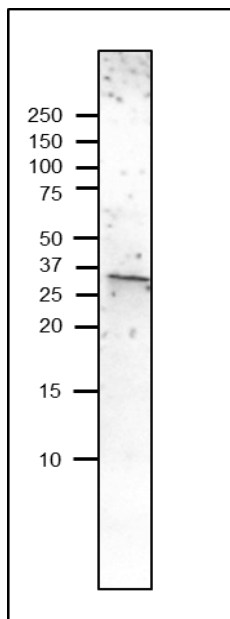


Fig.1 Western blot of Caleosin 3 in extract of senescent leaves of arabidopsis

Crude extract of senescent leaves of *Arabidopsis thaliana* was run on 15-20% gradient SDS-PAGE and blotted overnight to PVDF membrane by wet system. Blocking was done with 3% skim milk. The anti-clo3 antibody was used at 1/5,000 dilution. Secondary antibody (goat anti-rabbit IgG antibody HRP-conjugated, ab97051) was used at 1/10,000 dilution. Calculated molecular mass of Caleosin 3 is 26.6 kDa.

Reference: This antibody has been described in Ref.1 and used in the following publications.

1. Shimada TL et al. A rapid and non-destructive screenable marker, FAST, for identifying transformed seeds of *Arabidopsis thaliana*. [Plant J.](#) 2010 Feb 1;61(3):519-28. PMID: [19891705](#) **WB (Arabidopsis)**
2. Shimada TL et al. Leaf oil body functions as a subcellular factory for the production of a phytoalexin in *Arabidopsis*. [Plant Physiol.](#) 2014 Jan;164(1):105-18. PMID: [24214535](#) **WB (Arabidopsis)**

Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.