

## Anti-CLO3 /Caleosin 3 (At) antibody, rabbit polyclonal

Product code	81-107
Size	100 μg
Storage	-20℃
Concentration	2.0 mg/ml
Buffer	PBS- with 50% glycerol
Purity	Purified IgG fraction with protein A from rabbit antiserum.
Immunogen	Synthetic peptide (C-VTSQRKVRNDLEETL) corresponding to Caleosin 3 protein (6-31 amino acids) of <i>Arabidosis thaliana</i> .
Isotype	Rabbit IgG
Reactivity	Arabidopsis thaliana. Not tested in other species.
Special notes	N/A
Application	1. 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 indicaed.  Expression is very low in young leaves and high in senescent leaves.  Subcellular location:  Lipid storage body, vacuole, Endoplasmic reticulum, chloroplast
Data Link	UniProtKB- <u>O22788</u> (PXG3_ARATH)
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC	

PROCEDURES. NOT FOR MILITARY USE.



Data Images: 81-107 Anti- CLO3/Caleosin 3 (At) antibody, rabbit polyclonal

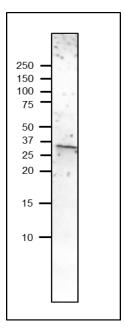


Fig.1 Western blot of Caleosin 3 in extract of senescent leaves of arabidopsis

Crude extract of senescent leavesof *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 anticlo3 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 molecaular mass of Caleosin 3 ia 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. <u>Plant J.</u> 2010 Feb 1;61(3):519-28. PMID: <u>19891705</u> **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)