Anti-OLE1 (At) antibody, rabbit polyclonal

Product code	81-114
Size	200 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-KYATGEHPQGSDKLDS, corresponding to OLE1 protein (118-133 amino acids) of *Arabidosis thaliana.*
Isotype	Rabbit IgG
Reactivity	Arabidopsis thaliana. Not tested in other species.
Special notes	N/A
Application	1. Western blotting (1/2,000) 2. Immunoelectron Microscopy (1/500)
Background	Oleosins may have a structural role to stabilize the lipid body during desiccation of the seed by preventing coalescence of the oil. Probably interacts with both lipid and phospholipid moieties of lipid bodies. May also provide recognition signals for specific lipase anchorage in lipolysis during seedling growth. Oleosins also increase the viability of over-wintering oilseeds by preventing abnormal fusion of oil bodies during imbibition in the spring.Length;173 amino acids. Mass; 18,569 Subcellular location: Surface of oil bodies.
Data Link	UniProtKB P29525 (OLEO1_ARATH)

BioAcademia,Inc. Tel. 81-6-6877-2335 Fax. 81-6-6877-2336 info@bioacademia.co.jp https://www.bioacademia.co.jp/en/

Data Images: 81-114 Anti-OLE1 (At) antibody, rabbit polyclonal

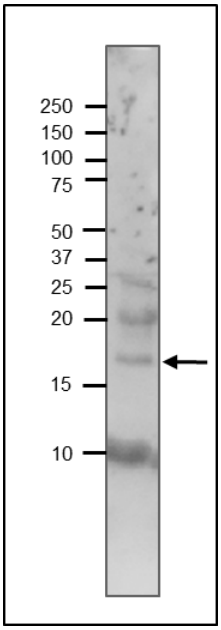

Fig.1 Western blot of OLE1 in homogenates of dry seeds of arabidopsis

Homogenates of dry seeds of *Arabidopsis thaliana* was run on SDS-PAGE (15-20% gradient gel) and blotted at 15 V overnight to PVDF membrane with wet system. Blocking was done with 3% skim milk. The anti-OLE1 antibody was used at 1 μg/ml. Secondary antibody (goat anti-rabbit IgG antibody HRP-conjugated, ab97051) was used at 1/10,000 dilution.

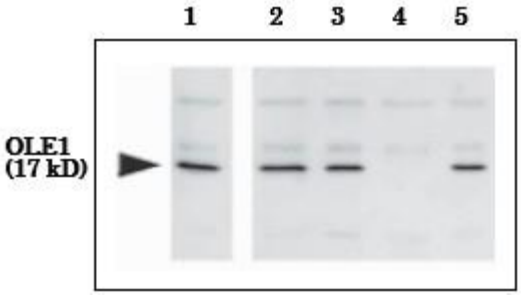

Fig.2 Western blot analysis of OLE1 protein in dry seeds of Arabidopsis.

Dry seeds were homogenized in SDS sample buffer (100 mM Tris/HCl, pH 6.8, 4% w/v SDS, 20% v/v glycerol, 10% v/v 2−mercaptoethnol).were homogenized in SDS sample buffer (100 mM Tris/HCl, pH 6.8, 4% w/v SDS, 20% v/v glycerol, 10% v/v 2 - mercaptoethnol).The homogenates of wild-type (1), oleosin-deficient mutants, *ole4* (2), *ole3* (3), *ole1* (4) and *ole2* (5) were run on SDS-PAGE (15% gel) and blotted to PVDF membrane. The membrane was blocked by 5% skim milk. The anti-OLE1 antibody was used at 1/2,000 dilution. As the second antibody, HRP-conjugated goat anti-rabbit IgG (Pierce) was used at 1/2,000 dilution

OLE1 migrated slightly faster than the predicted mass of 18.6 kD.

BioAcademia,Inc. Tel. 81-6-6877-2335 Fax. 81-6-6877-2336 info@bioacademia.co.jp https://www.bioacademia.co.jp/en/

Reference. This antibody was described in Ref.1 and used in the following publications.

1. Shimada TL et al. A novel role for oleosins in freezing tolerance of oilseeds in Arabidopsis thaliana. Plant J. 2008 Sep;55(5):798-809. PMID: 18485063. **WB (arabidopsis)**
2. Shimada TL et al. A rapid and non - destructive screenable marker, FAST, for identifying transformed seeds of Arabidopsis thalianaPlant J. 2010 Feb 1;61(3):519-28. PMID: 19891705. **ImmunoeEctron microscopy (arabidopsis)**

Related Products

81-112 Anti-PBP1 N-terminal (At) antibody, rabbit polyclonal

81-115 Anti-OLE2 (At) antibody, rabbit polyclonal

81-116 Anti-PYK10 C-terminal (At) antibody, rabbit polyclonal

81-117 Anti-PYK10 Internal (At) antibody, rabbit polyclonal

BioAcademia,Inc. Tel. 81-6-6877-2335 Fax. 81-6-6877-2336 info@bioacademia.co.jp https://www.bioacademia.co.jp/en/