

Anti-VSR1 antibody, rabbit polyclonal

81-119 100 µg

Storage: Ship at 4°C and store at -20°C. Do not freeze below -20°C.

Reactivity: *Arabidopsis thaliana* and *Nicotiana tabacum*.

Immunogen: Recombinant His6-VSR1 (amino acids 20-566) of *Arabidopsis thaliana*.

Applications:

1. Western blotting (1/1,000-1/5,000)
2. Immunofluorescent staining (1/500)

Purity: IgG fraction purified with protein A from the rabbit antiserum to dVPE.

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

Background: Vacuolar-sorting receptor (VSR) involved in clathrin-coated vesicles sorting from Golgi apparatus to vacuoles. Required for the sorting of 12S globulin, 2S albumin and maybe other seed storage proteins to protein storage vacuoles (PSVs) in seeds. May also be implicated in targeting N-terminal propeptide containing proteins to lytic vacuoles. 623 amino acids with mass 68,992.

Subcellular localization: Golgi apparatus membrane

Data Link: UniProtKB [P93026](#) (VSR1_ARATH)

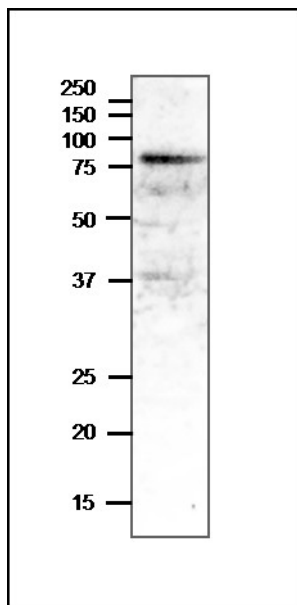


Fig.1 Western blot of dVPE in extract of maturing siliques of Arabidopsis

Crude extract of 19-day-old seedlings of *Arabidopsis thaliana* was run on SDS-PAGE (12.5% gel) and blotted to PVDF membrane by wet system. Blocking was done with 3% skim milk. The anti-VSR1 antibody was used at 2 µg/ml. Secondary antibody (goat anti-rabbit IgG antibody HRP-conjugated, ab97051) was used at 1/10,000 dilution.

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

1. Yamada K et al. Endosomal proteases facilitate the fusion of endosomes with vacuoles at the final step of the endocytotic pathway. [Plant J.](#) 2005 Mar;41(6):888-98. PMID: [15743452](#). **IF (Nicotiana tabacum)**
2. Tamura K et al. Arabidopsis KAM2/GRV2 is required for proper endosome formation and functions in vacuolar sorting and determination of the embryo growth axis. [Plant Cell.](#) 2007 Jan;19(1):320-32. PMID: [17259264](#). **WB (arabidopsis)**
3. Fuji K et al. Arabidopsis vacuolar sorting mutants (green fluorescent seed) can be identified efficiently by secretion of vacuole-targeted green fluorescent protein in their seeds. [Plant Cell.](#) 2007 Feb;19(2):597-609. PMID: [17293568](#) **WB (arabidopsis)**
4. Yamazaki M et al. Arabidopsis VPS35, a retromer component, is required for vacuolar protein sorting and involved in plant growth and leaf senescence. [Plant Cell Physiol.](#) 2008 Feb;49(2):142-56. PMID: [18222962](#) **WB (arabidopsis)**
5. Kang H et al. Trafficking of vacuolar proteins: the crucial role of Arabidopsis vacuolar protein sorting 29 in recycling vacuolar sorting receptor. [Plant Cell.](#) 2012 Dec;24(12):5058-73. PMID: [23263768](#). **WB (arabidopsis)**
6. Kunieda T et al. Spatiotemporal secretion of PEROXIDASE36 is required for seed coat mucilage extrusion in Arabidopsis. [Plant Cell.](#) 2013 Apr;25(4):1355-67. PMID: [23572548](#). **WB (arabidopsis)**
7. Ichino T et al. GFS9/TT9 contributes to intracellular membrane trafficking and flavonoid accumulation in Arabidopsis thaliana. [Plant J.](#) 2014 Nov;80(3):410-23. PMID: [25116949](#). **WB (arabidopsis)**
8. Fuji K et al. The Adaptor Complex AP-4 Regulates Vacuolar Protein Sorting at the trans-Golgi Network by Interacting with VACUOLAR SORTING RECEPTOR1. [Plant Physiol.](#) 2016 Jan;170(1):211-9. PMID: [26546666](#). **WB (Arabidopsis)**

Related Products

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- 81-120 Anti-ALEU antibody, rabbit polyclonal**
- 81-121 Anti- At 2S3P (2S3 Albumin precursor) antibody, rabbit polyclonal**
- 81-122 Anti- At 2S3M (2S3 Albumin) antibody, rabbit polyclonal**
- 81-123 Anti- At 12S (12S Globulin) antibody, rabbit polyclonal**
- 81-126 Anti-KAM2 antibody, rabbit polyclonal**