

Anti-VPS35 antibody, rabbit polyclonal

81-124 200 µg

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

Immunogen: Recombinant His6-VPS35b (about 7/8 of the coding region) of *Arabidopsis thaliana*.

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

Purity: IgG fraction purified with protein A from the rabbit antiserum to VPS35.

Reactivity: Arabidopsis thaliana. Not tested in other species.

Applications:

1. Western blotting (1/1,000)
2. Immunoprecipitation (1/100)
3. Immunofluorescent staining (1/400)
4. ELISA (assay dependent)

Background: VPS35 (Vacuolar Protein Sorting-associated protein 35) plays a role in vesicular protein sorting. Component of the membrane-associated retromer complex which is essential in endosome-to-Golgi retrograde transport. Also involved in the efficient sorting of seed storage proteins globulin 12S and albumin 2S. The VPS29-VPS26-VPS35 subcomplex may be involved in recycling of specific cargos from endosome to the plasma membrane. *Arabidopsis thaliana* has three VPS35 homologs designated VPS35a, VPS35b and VPS35c, and among them, VPS35b plays most important role in these processes. VPS35b consists of 790 aa with mol mass, 89.4 kDa.

Subcellular localization: Localized in pre-vacuolar compartments (PVC).

Data Link: UniProtKB [F420P8](https://www.uniprot.org/entry/F420P8) (VP35B_ARATH)

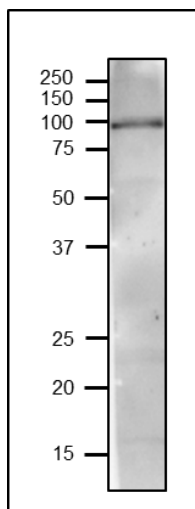


Fig.1 Western blot of VPS35 in extract of arabidopsis seedlings

Crude extract of *Arabidopsis thaliana* 19-day seedlings 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-VPS35b antibody was used at 2.0 µg/ml. Secondary antibody (goat anti-rabbit IgG antibody HRP-conjugated, ab97051) was used at 1/10,000 dilution.

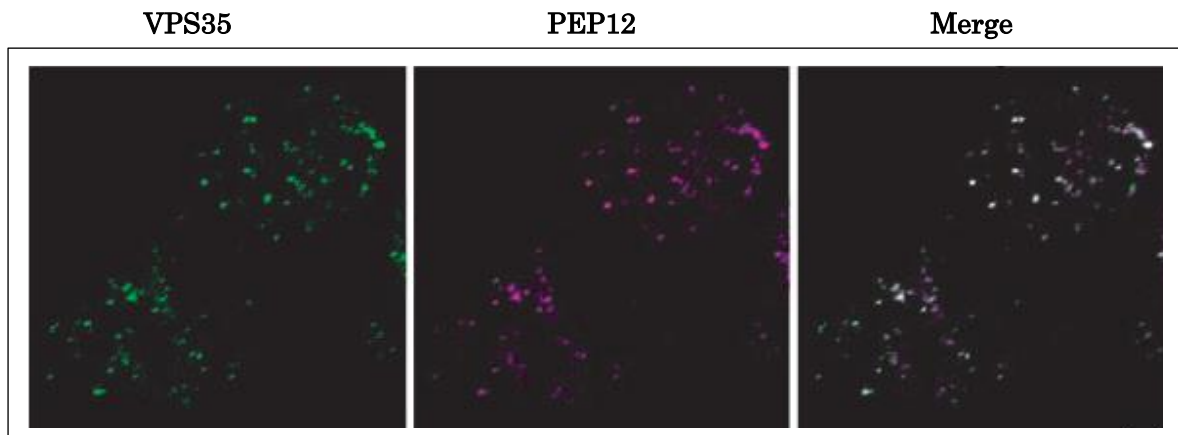


Fig.2 Localization of VPS35 as revealed by immunofluorescent staining

Tobacco NY-2 cells transformed with Arabidopsis VPS35b and PEP 12 genes were reacted with anti-VPS35b (green) and PEP12 (magenta, a PVC marker) antibodies. VPS35b is colocalized with PEP12 in pre-vacuolar compartments (PVC).

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

1. Shimada T et al. AtVPS29, a putative component of a retromer complex, is required for the efficient sorting of seed storage proteins. [Plant Cell Physiol.](#) 2006 Sep;47(9):1187-94. PMID: [16926167](#). **WB (Arabidopsis)**
2. 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, IP, IF (Arabidopsis),**

Related Product: 81-125 Anti-VPS29 antibody, rabbit polyclonal

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