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Kolb C., Nagel M.-K., Kalinowska K., Hagmann J., Ichikawa M., Anzenberger F., Alkofer A., Sato M.H., Braun P., and Isono E. FYVE1 Is Essential for Vacuole Biogenesis and Intracellular Trafficking in Arabidopsis

During the preparation of Figure 4 in this article an error was made with the two mutant alleles and as a result, the same immunoblot appeared in Figure 4, A and B. The correct immunoblots are now shown, with a red box indicating the areas of the figure that were fixed. The figure legend has been updated as well.

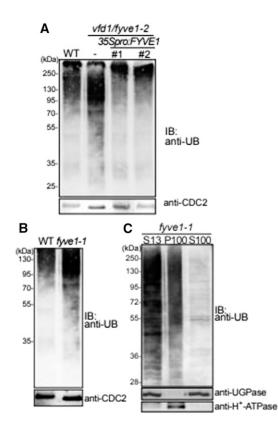


Figure 4. fyve1 mutants accumulate ubiquitinated proteins in the membrane fraction.

(A) and (B) immunoblots with an anti-ubiquitin P4D1 antibody from total protein extracts. (A) Total extracts of 7-day-old wild type and vfd1(fyve1-2) together with two complemented lines of vfd1(fyve1-2) were subjected to immunoblotting with anti-ubiquitin antibody. CDC2 was used as a loading control. (B) 7-day-old fyve1-1 mutants in comparison to wild-type seedlings of the same age were analyzed with an anti-ubiquiti immunoblot. CDC2 was used as a loading control. (C) Total extracts (S13) of 7-day-old fyve1-1 mutants were fractionated by ultracentrifugation to separate the microsomal fraction (P100) and soluble fraction (S100) and subjected to immunoblotting using an anti-ubiquitin antibody. Note that the majority of ubiquitinated proteins accumulate in the membrane (P100) fraction. Anti-UGPase and anti-H⁺-ATPase antibodies were used for controls for the soluble and membrane fractions, respectively.

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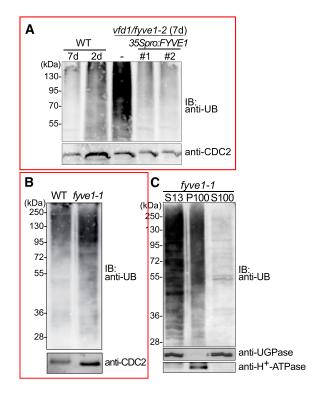


Figure 4. *fyve1* mutants accumulate ubiquitinated proteins in the membrane fraction.

(A) and (B) immunoblots with an anti-ubiquitin P4D1 antibody from total protein extracts. (A) Total extracts of 2- and 7-day-old wild type and 7-day-old vfd1(fyve1-2) together with two complemented lines of vfd1(fyve1-2) were subjected to immunoblotting with anti-ubiquitin antibody. CDC2 was used as a loading control. (B) 7-day-old fyve1-1 mutants in comparison to wild-type seedlings of the same age were analyzed with an anti-ubiquitin immunoblot. CDC2 was used as a loading control. (C) Total extracts (S13) of 7-day-old fyve1-1 mutants were fractionated by ultracentrifugation to separate the microsomal fraction (P100) and soluble fraction (S100) and subjected to immunoblotting using an anti-ubiquitin antibody. Note that the majority of ubiquitinated proteins accumulate in the membrane (P100) fraction. Anti-UGPase and anti-H⁺-ATPase antibodies were used for controls for the soluble and membrane fractions, respectively.