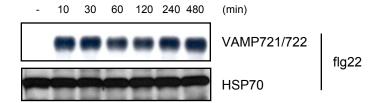


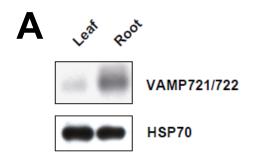
Supplementary Fig. 1. Depletion of VAMP721/722 enhances cell size reduction by flg22.

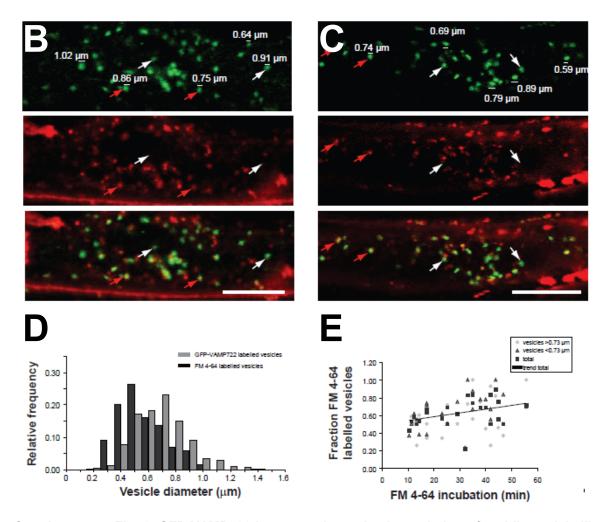
Seedlings of the indicated genotype plants were grown in liquid medium and treated with 100 nM flg22 for one week. After destaining with ethanol, meshophyll cells were photographed using a light microscope. Note that FLS2-dependent cell size reduction was more pronounced in the progeny seedlings of selfed VAMP721/722-depleted plants ($VAMP721^{-/-}$ $VAMP722^{+/-}$ and $VAMP721^{+/-}$ $VAMP722^{-/-}$). Scale bar, 100 μ m.



Supplementary Fig. 2. Truncated but still-active bacterial MAMP flg22 rapidly stabilizes VAMP721/722 in suspension-cultured Arabidopsis cells.

Cells were treated with 1 μ M flg22 for the indicated time. Equal amounts of extracted proteins were analyzed by immunoblot using anti-VAMP721/722 antibody. As a loading control, the amounts of HSP70 were analyzed.





Supplementary Fig. 3. GFP-VAMP722 is present in a mixed population of mobile vesicle-like compartments with an average size larger than that of the total FM4-64 labelling population.

- (A) High steady-state levels of VAMP721/722 in roots. Total proteins extracted from the indicated tissues of Arabidopsis seedlings were grown on solid MS medium. Equal amounts of protein extracts were subjected to immunoblot analysis using anti-VAMP721/722.
- (B) and (C) Fluorescence micrographs of the GFP (upper), FM 4-64 fluorescence (middle) and a merged image of both signals (bottom) of epidermal cells of a mature part of a primary root. Arabidopsis seedlings expressing GFP-VAMP722 were stained with FM 4-64 for 13 (B) or 47 (C) minutes. Scale bar, 10 μ m. White arrows, GFP-VAMP722 only vesicles; red arrows, GFP-VAMP722/FM 4-64-co-localized vesicles.
- (D) Size distribution of GFP-VAMP722 and FM4-64 labelled vesicles. The measurement data were binned to vesicle size windows of $0.1~\mu m$.
- (E) Fractions of GFP-VAMP722 vesicles per micrograph that co-label with FM4-64 in relation to the time incubated with FM 4-64. \blacksquare All vesicles, vesicles with a diameter below (\blacktriangle) and above (\blacklozenge) the average vesicle diameter (0.73 µm).