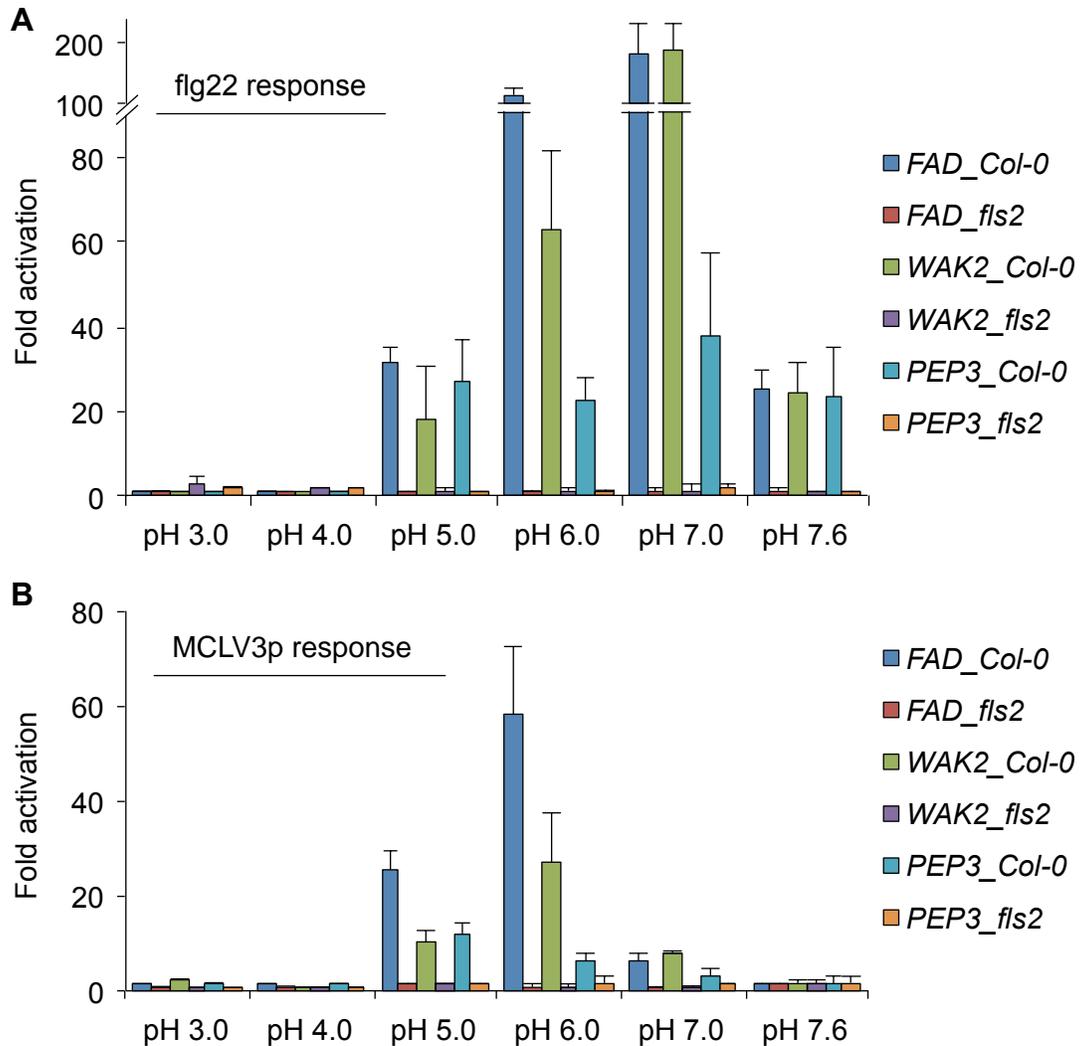


Supplemental Figure 1. Immune response marker gene activation with three independent batches of CLV3p preparations.

Immune response marker genes, *FRK1* (A) and *WRKY30* (B), were activated by three different batches of CLV3p. Number 1 is the 12 aa CLV3p (RTVP_hSGP_hDPLHH; P_h indicates hydroxyproline) ordered from GenScript. Number 2 and 3 peptides containing an additional tyrosine residue at the N-terminus (YRTVP_hSGP_hDPLHH) were ordered from Phoenix Pharmaceuticals, Inc. Although the length of peptides 2 and 3 is 13 aa, the activity of Tyr-MCLV3p is the same as the 12 aa MCLV3p. Seven-day old seedlings of Col-0 and the *fls2* mutant grown in liquid culture were analyzed by qRT-PCR after treatment with 20 μ M peptides for 1 h. Error bars indicate S.D. ($n = 3$).

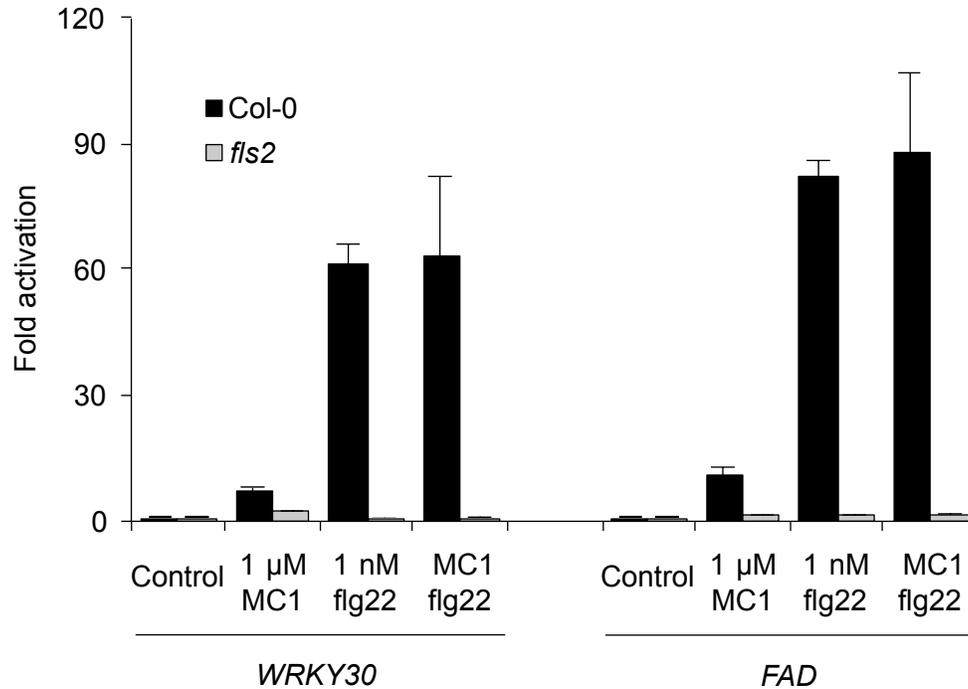


Supplemental Figure 2. Flg22 and MCLV3p exhibit distinct pH optima in immune response marker gene activation.

(A) Immune response marker genes, *FAD* (*At1g26380*), *WAK2* (*At1g79680*) and *PEP3*, were activated by 1 nM flg22 in Col-0 and *fls2* seedlings.

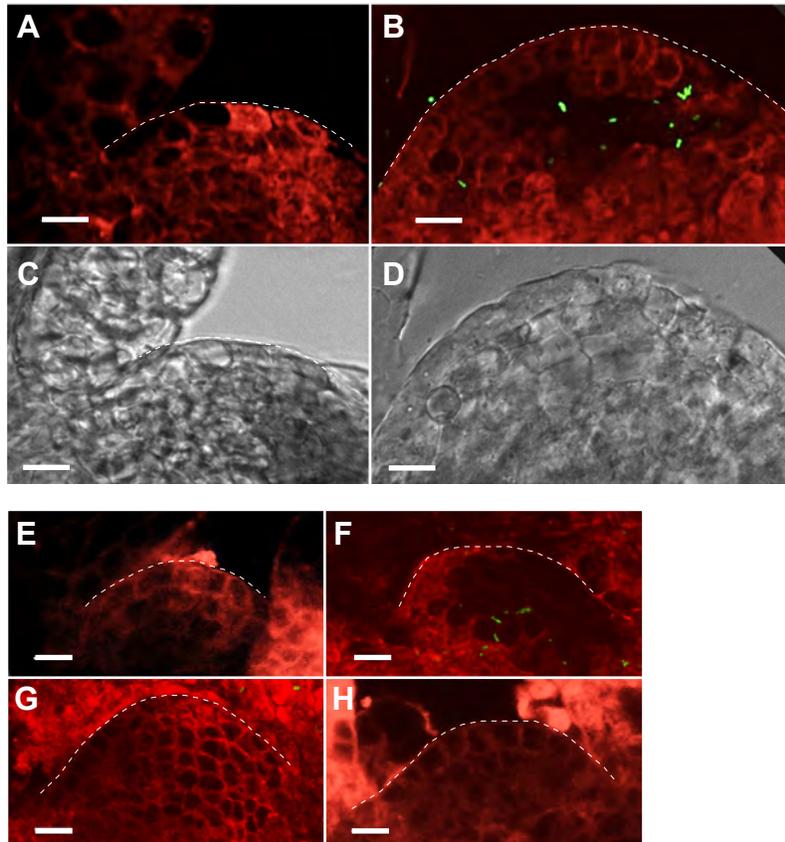
(B) Immune response marker genes, *FAD*, *WAK2* and *PEP3*, were activated by 1 μ M MCLV3p in Col-0 and *fls2* seedlings.

Seven day-old seedlings grown in liquid culture were treated with 1 nM flg22 **(A)** or 1 μ M MCLV3p **(B)** for 1 h in various pH ranges. The expression of each gene was normalized by *ACT2*. Relative activation fold was normalized by the control level without peptide treatment in each pH. Error bars indicate S.D. ($n = 3$).



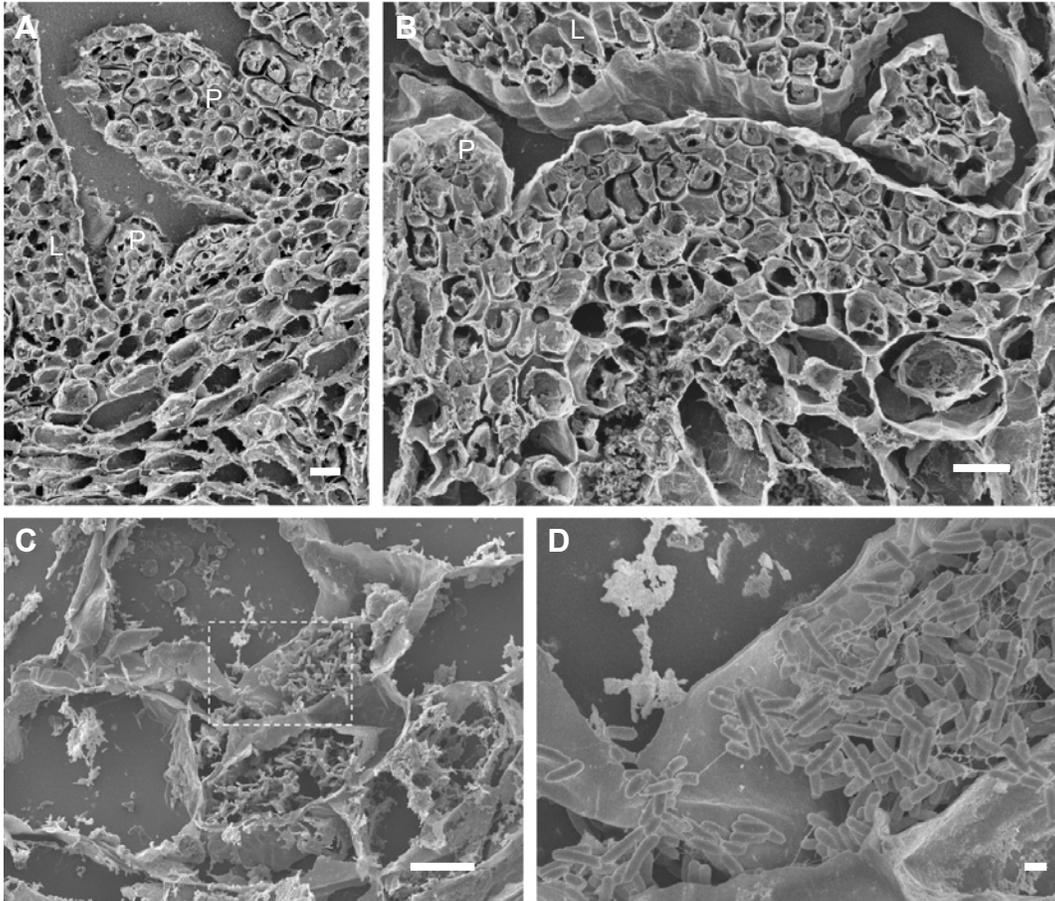
Supplemental Figure 3. MCLV3p did not block immune response marker gene activation by flg22 at pH 7.0.

Immune response marker genes, *WRKY30* (left) and *FAD* (right), were activated by flg22 in the presence of MCLV3p. Seven day-old seedlings of Col-0 and *fls2* grown in liquid culture were treated with 1 nM flg22, 1 μ M MCLV3p, or both 1 nM flg22 and 1 μ M MCLV3p for 1 h at pH 7.0. The expression of each gene was normalized by *ATC2*. Error bars indicate S.D. ($n = 3$).



Supplemental Figure 4. *Pst* DC3000-GFP invades inside the SAM of *clv3* and *fls2* seedlings.

Bacterial infection analyses in the SAM of *Ler* (**A**, **E**), *clv3-2* (**B**), *fls2-24* (**F**), *clv1-1* (**G**) and *clv2-1* (**H**). *P. syringae* pv. *tomato* DC3000-GFP was co-cultivated grown in liquid medium with seedlings for 4 days. *Pst* DC3000-GFP (green) and the cell membrane (red; stained by FM4-64 dye) were visualized using a confocal laser-scanning microscope. (**C**) and (**D**) are the bright field pictures of *Ler* (**A**) and *clv3* (**B**). Scale bars in (**A**) to (**H**) = 10 μm.

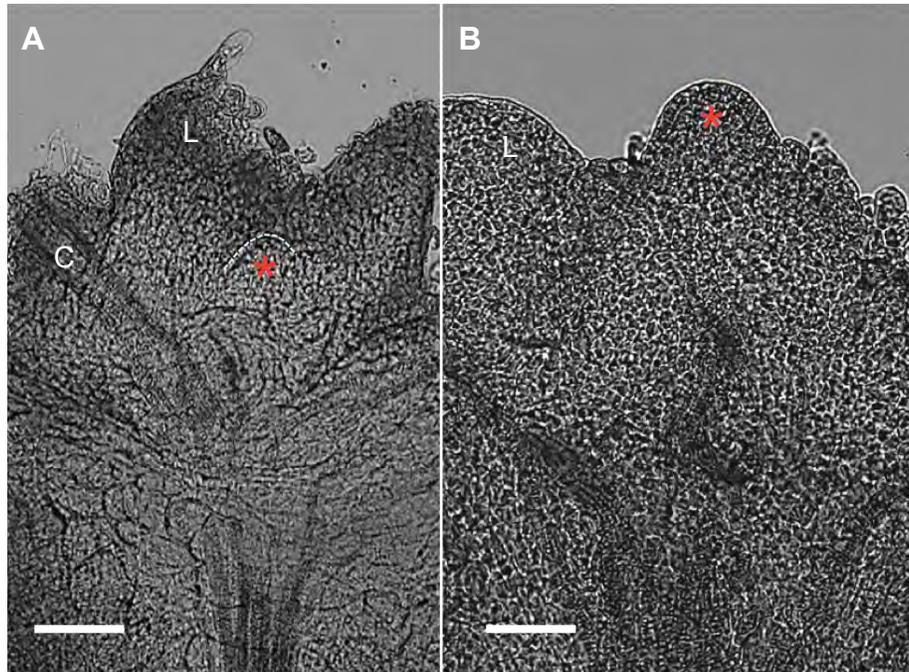


Supplemental Figure 5. Analysis of *Pst* DC3000 infection in the SAM regions of seedlings grown in liquid culture by SEM.

(A) and **(B)** are non-cropped pictures of Figures 7A and 7B. Non-cropped pictures of **(A)** and **(B)** show the SAM and flanking leaf primordia (P) and young leaves (L). Scale bars of **(A)** and **(B)** = 10 μ m.

(C) Bacterial colonization in plant cells by SEM analysis. Scale bar = 10 μ m.

(D) A magnified image of selected region (white dot box) in **(C)** showing bacterial colonization. Scale bar = 1 μ m.



Supplemental Figure 6. Visible SAM in *Arabidopsis* seedlings.

The SAM of *Ler* (**A**) and *clv3-2* (**B**) seedlings grown in liquid culture are shown. Most tissues from cotyledons and early true leaves were removed. The SAM (white dot line) of *Ler* and *clv3-2* is surrounded by the remaining tissues from cotyledons (C) and young leaves (L). Red asterisks indicate the SAM region. Scale bars in (**A**) and (**B**) = 50 μm .

Supplemental Table 1. Primers used for qRT-PCR

Name	Forward primer	Reverse primer
<i>FRK1</i> (<i>At2g19190</i>)	ATCTTCGCTTGGAGCTTCTC	TGCAGCGCAAGGACTAGAG
<i>WRKY30</i> (<i>At5g24110</i>)	GCAGCTTGAGAGCAAGAATG	AGCCAAATTTCCAAGAGGAT
<i>PEP3</i> (<i>At5g64905</i>)	TCCGGTCTCGAAAGTTCATC	CTCATCTTCCTCGCTGTGTG
<i>ACT2</i> (<i>At3g18780</i>)	TCCCTCAGCACATTCCAGCAGAT	AACGATTCCTGGACCTGCCTCATC
<i>DcGFP</i>	TGGAAGCGTTCAACTAGCAG	AAAGGGCAGATTGTGTGGAC
<i>FAD</i> (<i>At1g26380</i>)	ATCAAGGGTGAGGAGAGACG	GAGCATACAATCCAATATTTCAACC
<i>WAK2</i> (<i>At1g79680</i>)	AGGGAAGGAAACGACCAAGT	GCGACGAAGATGTTGTAGCA