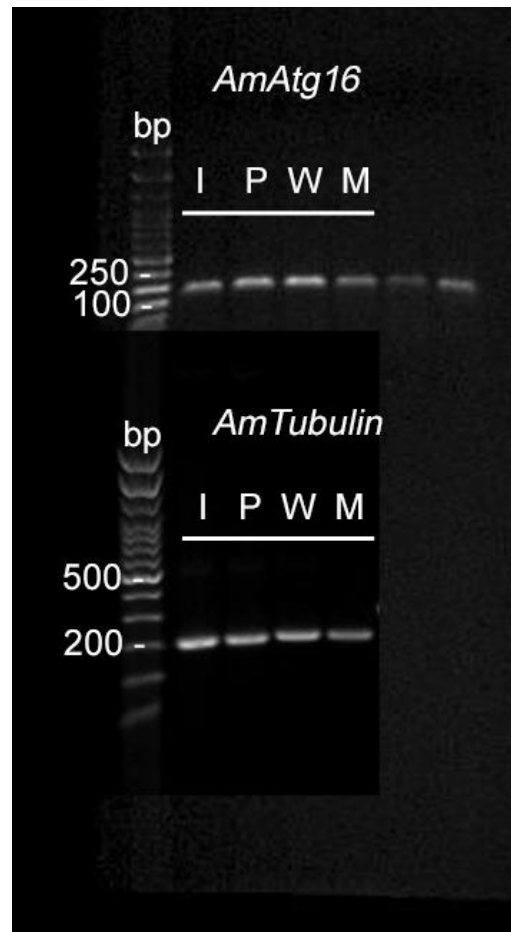
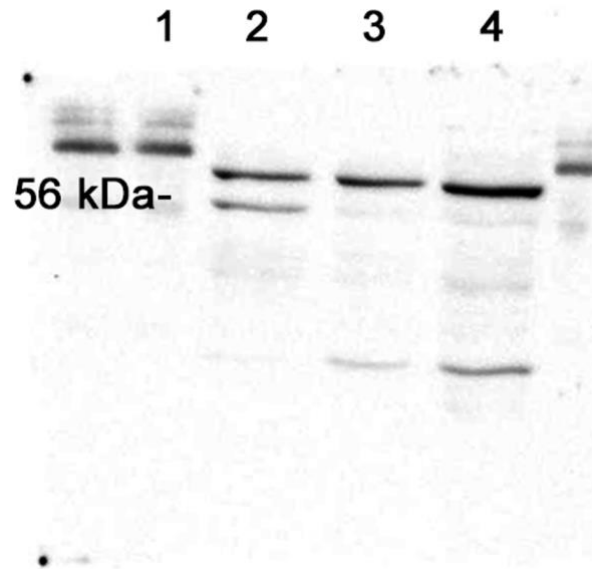


**Online Resource A.5. Primers used for Atg16 PCR experiments.**

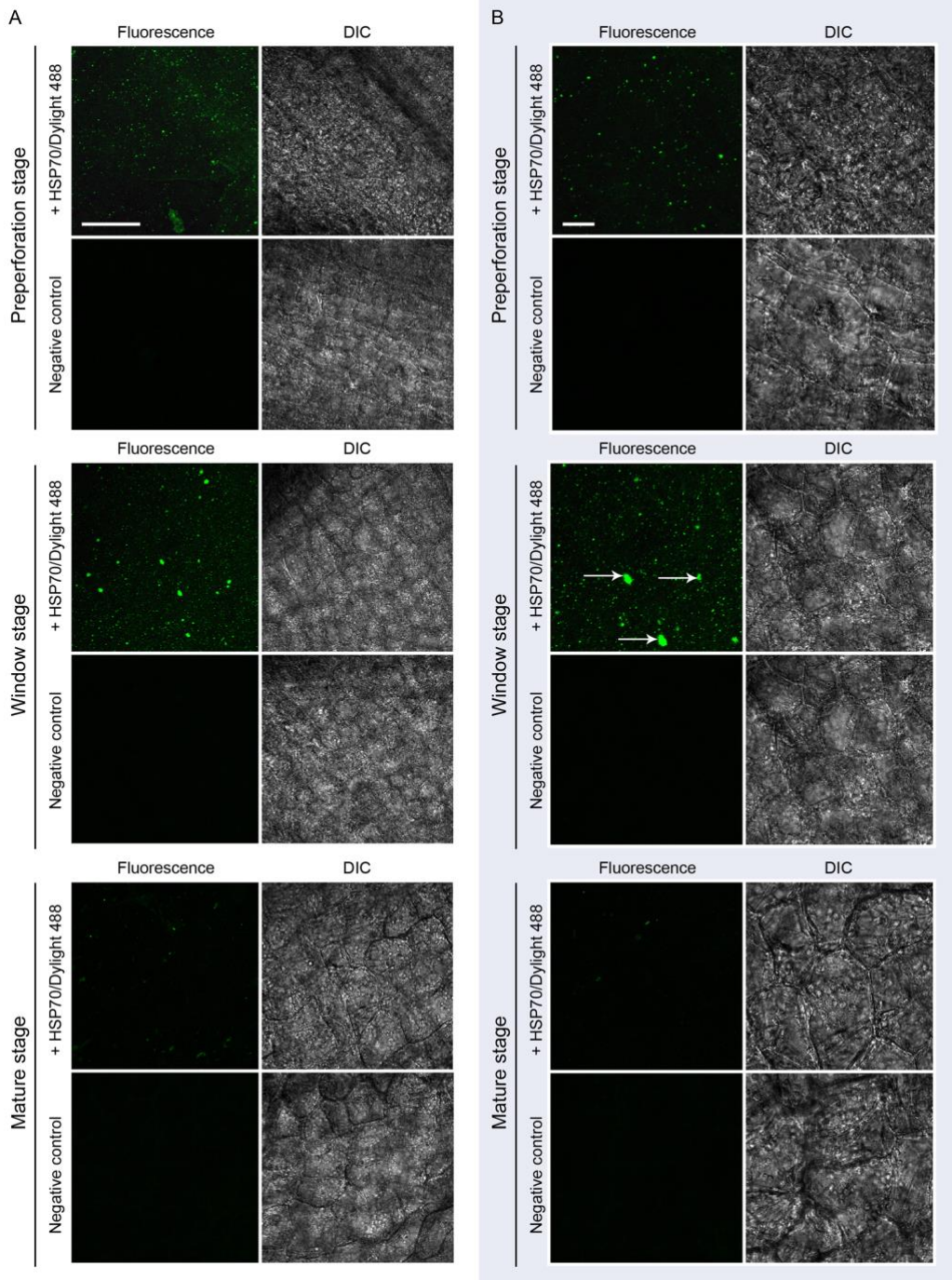
Unigene name	qPCR Forward Primer (5'→3')	qPCR Reverse Primer (5'→3')	Product Length (bp)	TM (°C)
Am Atg16 (DN8043_c0_g1_i11)	TGTATGAAAGACATGCT	GCAATCCCATATTTTACG	244	54.0
Am $\alpha$ -tubulin (DN41439_c0_g1_i3)	GTGGTGCTGAGTCTGGTGA	AAGCACAGGACGGTACACAC	197	54.0
<b>Full length Am Atg16 primers</b>	<b>Primer sequence (5'→3')</b>	<b>Product Length (bp)</b>	<b>TM (°C)</b>	
Forward full length primer (NcoI)	CGATGGCCATGGGATGGCGATTGGCGAAGCGGGCAITGG*	1530	54.0	
Reverse full length primer (HindIII)	GCCGGATCAAGCTTTCATGTCCATACACAGAGC*	1530	54.0	
*Underlined sequences are restriction enzyme (RE) sites				



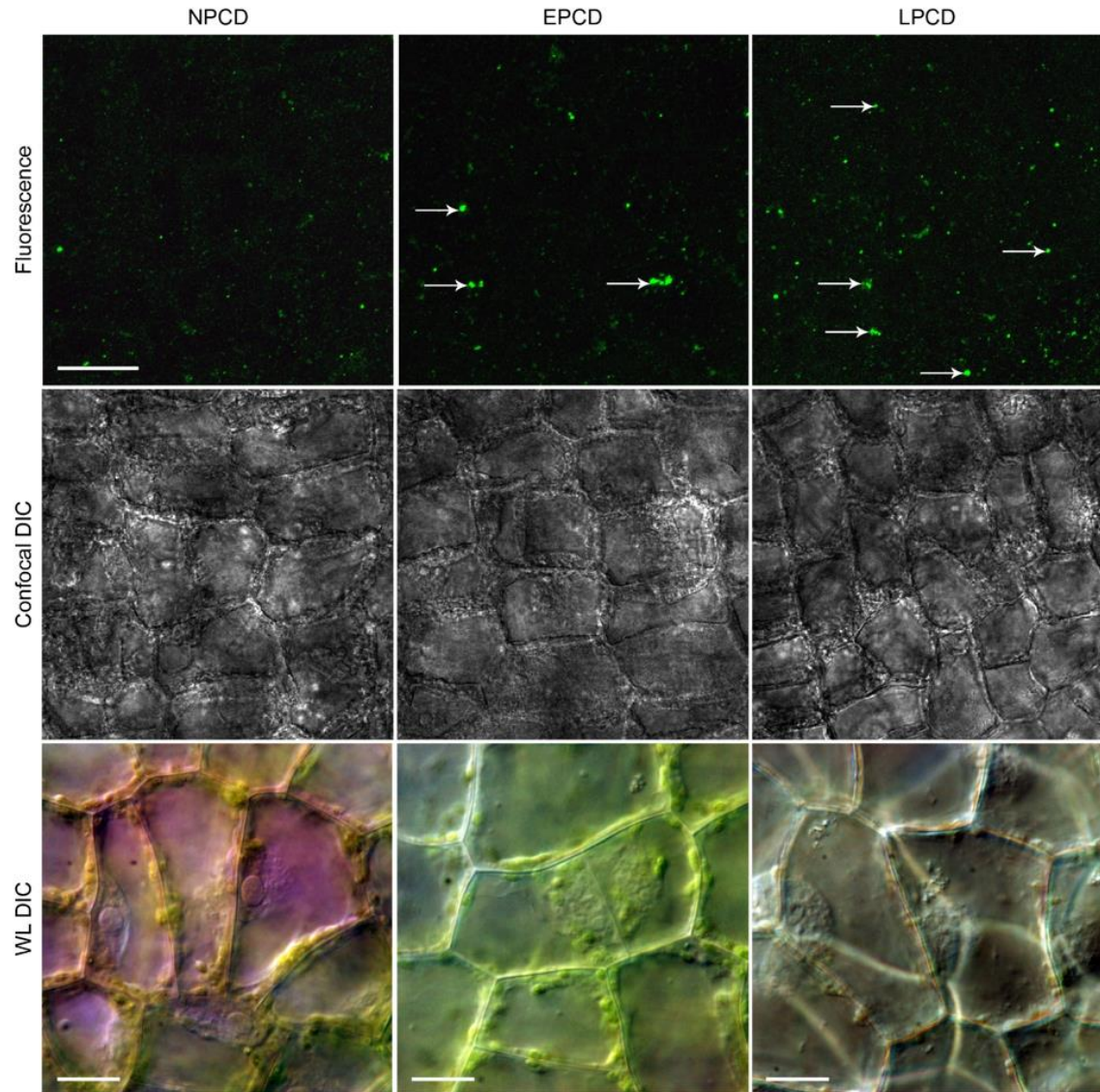
**Online Resource A.6. Atg16 and tubulin PCR products.** cDNA from imperforate (I), pre-perforation (P), window (W), and mature (M) leaves were probed with qPCR primers for lace plant *Atg16* (top gel) and  $\alpha$ -tubulin (bottom gel; see Online Resource A.5. above for primer information) for 30 cycles at 54°C. PCR products were then resolved in a 1.0% agarose gel alongside a Gene Ladder (Thermo Scientific). Primers for lace plant *Atg16* produced a 227 bp product and primers for lace plant  $\alpha$ -tubulin produced a 197 bp fragment.



**Online Resource A.7. Anti-Atg16 reactivity.** Protein extract from lace plant leaves and recombinant AmAtg16 were resolved in SDS polyacrylamide gels, transferred to nitrocellulose, and probed with anti-Atg16 antibody. Lane 1, protein standard ladder; 2, 0.1 µg of recombinant *AmAtg16* protein; 3, 20 µg of protein extract from lace plant pre-perforation leaf stage; 4, 20 µg of protein extract from lace plant window leaf stage.



**Online Resource A.8.** Two different replicates (A and B) of Hsp70 immunoprobing of lace plant pre-perforation, window and mature leaf stages. Arrows indicate detection of +Hsp70 puncta in different leaf stages.



**Online Resource A.9.** Hsp70 immunoprobing within window leaf NPCD, EPCD, and LPCD cells.