

Supplemental Table 1. Nucleotide sequences of primer sets used in this study.

Primer	Sequence (5' to 3')^a	PCR product
I. Semi-quantitative PCR		
<i>Nco</i> ILILIM15'	<u>CCCCATGGC</u> ATTTC AAGGGACAACCCAG	<i>LILIM1</i> gene
<i>Nco</i> Bg/IIILILIM13'	<u>CCCCATGGCAGATCT</u> GGCTGTCTCAGCCACT	<i>LILIM1</i> gene
LlrRNA5'	GGACAGTCGGGGGCATTCTGAT	<i>rRNA</i> gene
LlrRNA3'	CCAGACAAATCGCTCCACCAAC	<i>rRNA</i> gene
II. Expressing fluorescent or non-fluorescent LILIM1 and deletion proteins		
<i>Nco</i> ILILIM15'	<u>CCCCATGGC</u> ATTTC AAGGGACAACCCAG	<i>LILIM1</i> gene and truncated from
<i>Bg</i> IIILILIM15'	AGTCTAGAGGAT AGATCT ATGGCATTTC AAG	<i>LILIM1</i> gene
<i>Nco</i> ILILIM13'	<u>CCCCATGGCAGATCT</u> GGCTGTCTCAGCCACT	<i>LILIM1</i> gene and truncated from
<i>Nco</i> ILILIM1 ^Δ Nt5'	<u>CCCCATGGGGTGCATGGC</u> ATGCACAAAGACAGTG	<i>LILIM1</i> ^Δ Nt gene
<i>Nco</i> ILILIM1 ^Δ Zf15'	<u>CCCCATGGGGCGCTGCC</u> ACCACTGCAAGGGCACCC	<i>LILIM1</i> ^Δ Zf1 gene
<i>Nco</i> ILILIM1 ^Δ LIM15'	<u>CCCCATGGGGTATGATCA</u> ACTCTTCAAGAGAACTG	<i>LILIM1</i> ^Δ LIM1 gene
<i>Nco</i> ILILIM1C5'	<u>CCCCATGGGGGCGAACA</u> AAAGTCTCAGGTGCATT	<i>LILIM1C</i> gene
<i>Nco</i> Bg/IIILILIM1 ^Δ Ct3'	<u>CCCCATGGCAGATCT</u> ATGATGCCTTG CAGTAAAGTGTCC	<i>LILIM1</i> ^Δ Ct gene
<i>Nco</i> Bg/IIILILIM1 ^Δ Zf43'	<u>CCCCATGGCAGATCT</u> TCCATGTGCGCATTGAAGCAGCT	<i>LILIM1</i> ^Δ Zf4 gene
<i>Nco</i> Bg/IIILILIM1 ^Δ LIM23'	<u>CCCCATGGCAGATCT</u> CTTCTCTTTGTACCAGCAAATGC	<i>LILIM1</i> ^Δ LIM2 gene
<i>Nco</i> Bg/IIILILIM1N3'	<u>CCCCATGGCAGATCT</u> ATTCTCGGTACCGATGGGTTTCTC	<i>LILIM1N</i> gene
III. Expressing fluorescent protein and expression fluorescent marker protein		
<i>Xba</i> IRFP5'	AAACTCGAGCCATCTAGACCATGGCCTCCTCCGAGGACG	<i>RFP</i> gene
<i>Bg</i> IIIRFP3'	CAGCACCTCTAGAA AGATCT GGCGCCGGTGGAGTGGCGGCC	<i>RFP</i> gene
<i>Bg</i> IIImTalin5'	GCCGCCACCACCTGTTCTG AGATCT AACTTTGAGGAACAAAT CCTAG	<i>mTalin</i> gene
<i>Bg</i> IIImTalin3'	CCC AGATCT TTAGTGCTCGTCTCGAAGCTCTGAAG	<i>mTalin</i> gene
<i>Bg</i> IIIPH5'	GGGATCCTCTAGAG AGATCT GACTCGGGC	<i>PH</i> gene
<i>Bg</i> IIIPH3'	CCGCGGTACCGTCTGACT AGATCT CTAGATGTTGAGCTC	<i>PH</i> gene
<i>Xba</i> ICYS15'	CCCAGCTTGAATTCTCTAGACCATGGGGATGAGGCAG	<i>CYS1:GFP</i> gene
<i>Bg</i> IIIGFP3'	CTCAGTTGGAATTCTAGATTA AGATCT GGCGCCGG	<i>CYS1:GFP</i> gene
<i>Nco</i> INAG5'	GGGGCCGCCCCCATGGCGAGGATCTCGTGTGAC	<i>NAC:CFP</i> gene
<i>Sac</i> ICFP3'	GGCCGCGGCGGAGCTCTATTGTTATAGTTCATCCATGCC	<i>NAC:CFP</i> gene

^aThe sequences shown as underlined, bold, gray box, and italicize indicate the *Nco*I, *Bg*III, *Xba*I, and *Sac*I sites, respectively.

Supplemental Movie Legends

Time-lapse imaging showing constant intracellular distribution patterns of Nt PLC3, PI 4,5-P₂ and DAG in growing pollen tubes.

Single confocal sections of bombarded lily pollen tubes with 7.5µg plasmid expressing GFP (Movie 1), LILIM1:GFP (Movie 2 and 3) and with 3 µg plasmid expressing LILIM1:GFP (Movie 4). Six hours after gene transfer tubes were imaged at a rate of 1 frames per 9 s (30 images [Movie 1], 60 images [Movie 2 and 3] and 24 images [Movie 4] total), and are replayed at 2 frames (Movie 1, 2 and 3) and 1 frame (Movie 4) per second. All movies show central sections of pollen tubes lying flat on the cover-slip surface and represent at least 3 similar data sets collected in at least two independent experiments.

Supplemental Movie 1. Dynamic imaging of GFP and FM4-64 in pollen tubes overexpressing GFP.

Supplemental Movie 2. Dynamic imaging of LILIM1:GFP and FM4-64 in pollen tubes overexpressing LILIM1:GFP.

Supplemental Movie 3. Dynamic imaging of LILIM1:GFP and FM4-64 in pollen tubes overexpressed LILIM1:GFP.

Supplemental Movie 4. Dynamic imaging of LILIM1:GFP in pollen tubes moderately express LILIM1:GFP.