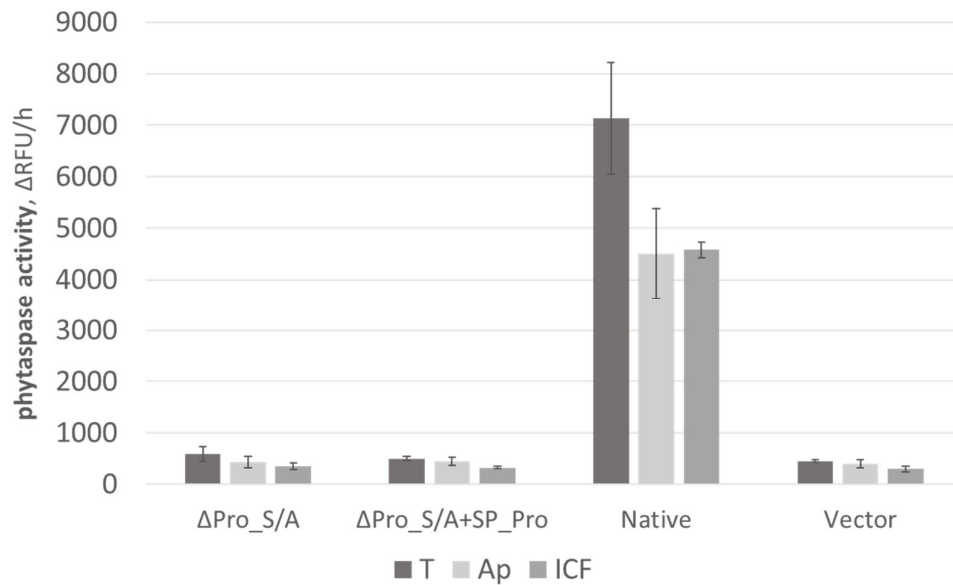


**Figure S1.** The S/A *NtPhyt* mutant lacks the phytaspase-specific proteolytic activity.

The  $\Delta$ Pro\_S/A mutant was produced in *N. benthamiana* leaves either alone ( $\Delta$ Pro\_S/A) or in combination with the SP\_Pro construct ( $\Delta$ Pro\_S/A + SP\_Pro). The proteolytic activity was determined in the apoplastic (Ap), intracellular (ICF), and total (T) fractions of leaf extracts using 20  $\mu$ M Ac-VEID-AFC as a substrate. The data for extracts from leaves producing the 'Native' *NtPhyt* and from control leaves (Vector) are given for comparison.



**Table S1.** List of the primers used in this study.

#	Primer name	Sequence
1	Bam_His_mRFP_dir	GTGGATCCTCTGCACCATCATCATCACCATATGGCCTCCTCCGAGGAC
2	mRFP_Sac(z)_rev	GGTGAGCTCTAAGCTCCGGTGGAGTGGC
3	pLH_seq_dir	GACCTCGAGAATTCTCAAC
4	deltaPro_rev	CGTGTGTGTCGTGGCCATAATAAATGGATTTAG
5	deltaPro_dir	CCATTTATTATGGCCACGACACACACGCTCTCAATTC
6	Sub_rev3-1	GTCAGATAACATTGTACCCTCA
7	SP_His_Pro_dir	CCATTTATTATGGCCCAGTCACACCATCATCATCACCATCAGTCAGAACTTATGTCATCC
8	Prodomain_Sac_rev	CCAGAGCTCAGTCACTTTTAACTGTCATGTCC
9	SP_middle_dir	CCTTATATTTCTTGTTTCCTTGCTATCTTACTTACTCTAAATCCATTATTATGGCCCAGTC
10	SP_Nco_dir_ver2	CACCATGGCCAATTGTATTACCTTATATTTCTTGTTCC