

Table S1. Primers used in qPCR and for amplification and domestication of *FTL* genes

Primers used in qPCR

Gene	Primer Name	Sequence	Annealing temperature
<i>AtUBQ10</i>	AtUBQ10_F	GAAGTTCAATGTTTCGTTTCATGT	58 °C
	AtUBQ10_R	GGATTATACAAGGCCCAAAA	
<i>CfFTL1</i>	HM_FTL1_111For	ATGAGAACCCAAGACCAGCA	60 °C
	HM_FT_R1	CTCCCTCCCTCTGGCAAT	
<i>CfFTL2-1</i>	HM_FTL2-1_111F	GGTGGTTTGTATGAGAGCCC	60 °C
	HM_FTL2-1_111R	TAGTGATGAAATTCGGGCGC	
<i>CfFTL2-2</i>	HM_FTL2-2_31F	AGGGAATTCTGAAGCATCCT	60 °C
	HM_FTL2-2_311R	TCCACCCAAATCTCCTTCCC	
Basta	BAR_F	CTACATCGAGACAAGCACGGT	58 °C
	BAR_R	CTGAAGTCCAGCTGCCAGAA	

Primers used for amplification and domestication of the *FTL* genes from *C. ficifolium*

Gene	Primer Name	Sequence
<i>CfFTL1</i>	GB-CfFT1_F	GCGCCGTCTCGCTCGAATGCCTAGAGCACCACCAAG
	GB_CfFT1_R_S	GCGCCGTCTCGCTCAAAGCTTACAACCTTCTTCCACCAG
<i>CfFTL2-1</i>	GB-CfFTL2-1_F	GCGCCGTCTCGCTCGAATGCCTAGAACAGCTTCAACA
	GB_CfFTL2-1_R_S2	GCGCCGTCTCGCTCAAAGCTTACAACCTTCTTCCACCACAACCTCCTTCC CT
<i>CfFTL2-2</i>	GB-CfFTL2-2_F	GCGCCGTCTCGCTCGAATGGATTCCAGAGAAGAAGCTC
	GB_CfFTL2-2_R_S	GCGCCGTCTCGCTCAAAGCTCACGAGCTTAATATAATGTGGA

Table S2. DNA components used for the construction of plasmids for permanent transformation of *Arabidopsis*.

Assembly	Plasmid ID	DNA part	Length	Source	Original reference
alpha11	pUPD1-CsVMV A1B2	CsVMV Promotor	538	this work, Virology lab, IEB	Verdaguer <i>et al.</i> , 1998
alpha11	pUPD1-VGE B35	VGE chimeric transcription factor	1752	this work, Virology lab, IEB	Semenyuk <i>et al.</i> , 2010
alpha11	pICH44300	<i>A.thaliana</i> actin2 terminator	485	MoClo kit	Engler <i>et al.</i> , 2014

alpha12	pUPD1 TM2-MAR	<i>N.tabaccum</i> , MAR	1001	Virology lab, IEB	Dušek <i>et al.</i> , 2020
alpha13	pUPD1-5xM35S A1B1	inducible promotor	172	this work, Virology lab, IEB	Semenyuk <i>et al.</i> , 2010
alpha13	pUPD1-TMV-Omega B2	transcriptional enhancer from Tobacco mosaic virus	76	this work, Virology lab, IEB	Sleat <i>et al.</i> , 1987
alpha13	pUPD2-Ftl-2-1-B35	<i>FTL2-1</i> CDS	549	this work, Plant Reproduction lab, IEB	Štorchová <i>et al.</i> 2019
alpha13	pICH41414	CaMV 35S terminator	204	MoClo kit	Engler <i>et al.</i> , 2014
alpha14	pUPD1-Sf35	short DNA stuffer fragment	45	this work, Virology lab, IEB	
omega1	pUPD1 RB7 – MAR	<i>N.tabaccum</i> , MAR	1168	Virology lab, IEB	Dušek <i>et al.</i> , 2020
alpha1	pP35S (GB0030)	CaMV 35S promoter with TEV transcriptional enhancer	738	this work, Virology lab, IEB, from pTF101	Paz <i>et al.</i> , 2004
alpha1	pUPD1 Basta	Bar, phosphinothricin acetyltransferase	561	this work, Virology lab IEB, from pTF101	Paz <i>et al.</i> , 2004
alpha1	pUPD1 VTSP	<i>Glycine max</i> , Vegetative tissue storage protein terminator	545	this work, Virology lab, IEB, from pTF101	Paz <i>et al.</i> , 2004
alpha2	pUPD2-OleFast	RFP protein fused to <i>A. thaliana</i> oleosin CDS and promoter	2311	this work, Pollen lab, IEB, adapted from MoCloKit	Engler <i>et al.</i> , 2014

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