

**Figure S1. Biological replicates of H3K27me3 and H3K4me3 ChIP experiments.** A, H3K27me3 relative abundance (± SE of 3 qPCR technical replicates) at different positions of the *FLC* locus for non vernalized seedlings (NV) and after 6 weeks of vernalization (V) followed by 3 weeks of warm (20°C), or 1 week of heat (30°C) given before (30-20°C) or after (20-30°C) 2 weeks of warm. H3K27me3 quantifications are relative to constitutive marks at *AGAMOUS* and *SHOOT MERISTEMLESS* genes. Data are from 2 independent experiments. B, H3K4me3 quantifications (± SE of 3 qPCR technical replicates) relative to constitutive marks at *ACTIN7* and *UBIQUITIN10* genes. Primers used are listed in tables S1 and S2.

	Targeted region	Locus	Name in figure 1A	Primer	Primer binding (relative to the transcription start site)	Amplicon size	Tm (°C)	Sequence	Calculated efficiency	<b>Hydridization</b> temperature	Refs.
c		<i>FLC</i> (AT5G10140)	-	FOR REV	157 333	177	58.17 56.09	CGACAAGTCACCTTCTCCAAA AGGGGGAACAAATGAAAACC	112,9 % (R <sup>2</sup> =0,990).	60	1
.ocus	Nucleation region	<i>FLC</i> (AT5G10140)	=	FOR REV	235 333	66	60.25 56.09	GTCGCTCTTCTCGTCGTCTC AGGGGGGAACAAATGAAAACC	93,5% (R <sup>2</sup> =0,995)	60	2
RING L		<i>FLC</i> (AT5G10140)	≡	FOR REV	936 1106	181	59.09 56.24	TTCCTATCTTTGCTGTGGACCT GAATCGCAATCGATAACCAGA	125 % (R <sup>2</sup> =0,99).	60	1
OWEF	Nucleation distal region	<i>FLC</i> (AT5G10140)	VI	FOR REV	3710 3793	84	56.73 59.54	GTTTCCAGTGGCCTTTTCAA GACCAGGCTGGAGAGATGAC	97,4 % (R <sup>2</sup> =0,995)	60	з
FL	ואמכופמנוסון מוזנמו ו פצוסוו	<i>FLC</i> (AT5G10140)	<	FOR REV	4008 4197	190	55,98 56,31	CTTTTTCATGGGCAGGATCA TGACATTTGATCCCACAAGC	99,8 (R <sup>2</sup> =0,988)	60	1
H3K27me3	First exon	<i>STM</i> (AT1G62360)	NA	FOR REV	92 195	104	56.63 59.38	GCCCATCATGACATCACATC GGGAACTACTTTGTTGGTGGTG	112 % (R <sup>2</sup> =0,996)	60	1
controls	Coding region	<i>AGAMOUS</i> (AT4G18960)	NA	FOR REV	1112 1240	129	55.86 57.76	TGGGAGAGGAAAGATCGAAA GCGACTTCAGCATCACAAAG	101,3 % (R <sup>2</sup> = 0,996)	60	4
Table S2. Lis	t of primers used for H3K	(4me3 analysis.									
	Targeted region	Amplfied locus	Name in figure 1B	Primer	<b>Primer binding</b> (relative to the transcription start site)	Amplicon size	Tm	Sequence	Calculated efficiency	<b>Hydridization</b> temperature	Refs.
		<i>FLC</i> (AT5G10140)	٧I	FOR REV	-34 23	80	56.44 52.86	GTAGATAGGCACAAAAAATAGAAAGAA GAGATACTAAGCGTTTTCTCT	113,8 % (R <sup>2</sup> =0,992).	60	1
FLOWERING LOCUS C	Promoter & beginning of the transcribed region	<i>FLC</i> (AT5G10140)	۲I	FOR REV	157 333	177	58.17 56.09	CGACAAGTCACCTTCTCCAAA AGGGGGAACAAATGAAAACC	112,9 % (R <sup>2</sup> =0,990).	60	1
		<i>FLC</i> (AT5G10140)	VIII	FOR REV	235 333	66	60.25 56.09	GTCGCTCTTCTCGTCGTCTC AGGGGGGAACAAATGAAAACC	93,5% (R <sup>2</sup> =0,995)	60	2
H3K4me3	First exon	<i>UBQ10</i> (AT4G05320)	NA	FOR REV	1934 1895	62	63.5 60.74	GGGCCTTGTATAATCCCTGATGAATAAGTG AAAGAGATAACAGGAACGGAAACATAGT	100,5 % (R <sup>2</sup> =0,996)	60	5
controls	Coding region	<i>ACT7</i> (AT5G09810)	NA	FOR REV	728 835	108	57.13 56.23	GATATICAGCCACTTGTCTGTG CTTACACATGTACAACAAAGAAGG	107,5% (R2=0,991)	60	6
References 1. Angel A, Son	g J, Dean C, Howard M. A Poly	/comb-based switch un	ıderlying quantii	tative epigene	etic memory. Nature 201	11; 476:105-8.					

Table S1. List of primers used for H3K27me3 marks quantification.

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