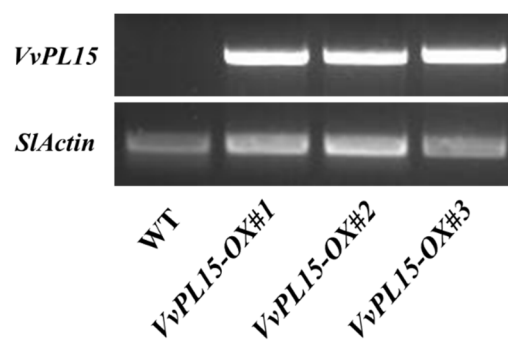


**Figure S1.** Identification of the *VvPL15-OX* Arabidopsis seedlings at the DNA level.



**Figure S2.** The phenotype of *VvPL15* overexpression.



**Figure S3.** Identification of the *VvPL15-OX* tomato at the DNA level.

**Table S1. Number of cis-elements occurrence in *VvPL* gene promoters.**

Gene name	Genome v2.1	TGA- element	P-box	ERE	ABRE	MYB	TCA- element	CGTCA- motif	W-box	LTR	MBS
<i>VvPL1</i>	VIT_01s0026g01670	0	1	3	4	8	1	2	2	3	2
<i>VvPL2</i>	VIT_01s0026g01680	1	1	4	5	6	1	0	0	0	1
<i>VvPL3</i>	VIT_01s0137g00240	1	1	0	9	5	1	6	1	0	2
<i>VvPL4</i>	VIT_05s0051g00590	0	1	4	9	6	0	2	2	1	0
<i>VvPL5</i>	VIT_07s0005g05520	0	0	1	11	9	1	2	0	0	0
<i>VvPL6</i>	VIT_08s0007g04820	0	0	3	3	3	1	0	1	0	0
<i>VvPL7</i>	VIT_08s0040g02740	0	0	3	0	3	1	2	1	0	0
<i>VvPL8</i>	VIT_10s0116g01160	0	0	5	1	3	0	0	0	0	0
<i>VvPL9</i>	VIT_13s0019g04900	2	2	7	0	0	1	0	1	0	0
<i>VvPL10</i>	VIT_13s0019g04910	0	1	8	0	2	0	0	1	0	1
<i>VvPL11</i>	VIT_14s0108g00030	0	0	0	2	4	0	0	0	0	0
<i>VvPL12</i>	VIT_14s0219g00230	0	0	2	3	7	0	6	1	1	1
<i>VvPL13</i>	VIT_16s0039g00260	0	1	2	2	6	1	0	0	1	1
<i>VvPL14</i>	VIT_17s0000g05740	0	1	1	4	9	0	0	1	0	1
<i>VvPL15</i>	VIT_17s0000g09810	2	0	1	0	2	4	4	2	0	0
<i>VvPL16</i>	VIT_19s0014g00510	0	0	2	0	7	0	0	1	3	0

**Table S2. Primers used in this study.**

Gene name	Sequence (5' to 3')
<i>VvActin</i> -F (qRT-PCR)	GAGATTCCGTTGTCCAGAAGTC
<i>VvActin</i> -R (qRT-PCR)	CAATGTTGCCATAGAGGTCCTT
<i>VvPL1</i> -F (qRT-PCR)	TTCACAACGCAAAAGGCTAGC
<i>VvPL1</i> -R (qRT-PCR)	GCATGGCGTAATGTTCCCTTC
<i>VvPL2</i> -F (qRT-PCR)	AATCCTAAGCCTGGAACCTTACG
<i>VvPL2</i> -R (qRT-PCR)	GTTTTGTCACTGGTCACCATCAG

<i>VvPL3</i> -F (qRT-PCR)	GTATGAAGGTGAAGACAAGTGC
<i>VvPL3</i> -R (qRT-PCR)	TCTTCGTTTCTTCTTTACCCCA
<i>VvPL4</i> -F (qRT-PCR)	GTCTAGAGAGAGAGCTTTTCGAC
<i>VvPL4</i> -R (qRT-PCR)	CAGCCATTGATGAGTTGTTTGA
<i>VvPL5</i> -F (qRT-PCR)	CCTTTATGGATCGTGTTCAAGC
<i>VvPL5</i> -R (qRT-PCR)	GATAAACTGGATGGTGATGCAC
<i>VvPL6</i> -F (qRT-PCR)	GTCACAGCGATTTCGTATGTGC
<i>VvPL6</i> -R (qRT-PCR)	TGACCACGTGTATATAGCCGC
<i>VvPL7</i> -F (qRT-PCR)	TGGTGATAGATGTATTCGGGTG
<i>VvPL7</i> -R (qRT-PCR)	CAGCTGCCTTCTCTGTAAGATA
<i>VvPL8</i> -F (qRT-PCR)	CCACGTGGTGAATAACGATTAC
<i>VvPL8</i> -R (qRT-PCR)	CTCCATCTTTTGCATCCATACG
<i>VvPL9</i> -F (qRT-PCR)	CCACGTGGTGAATAACGATTAC
<i>VvPL9</i> -R (qRT-PCR)	CTCCATCTTTTGCATCCATACG
<i>VvPL10</i> -F (qRT-PCR)	CAGAGCCACTCTCAACCTCAAT
<i>VvPL10</i> -R (qRT-PCR)	ACAGAGAGCACTTGTCTTCTCG
<i>VvPL11</i> -F (qRT-PCR)	TCCAGGGCGATAAGATCATGC
<i>VvPL11</i> -R (qRT-PCR)	GTTGACAACATGGACGAAGCC
<i>VvPL12</i> -F (qRT-PCR)	GTGCTGACCCTACCATCAACA
<i>VvPL12</i> -R (qRT-PCR)	ATGCCTCCACTCACTTTCTGG
<i>VvPL13</i> -F (qRT-PCR)	GTTGCATCCTCACAAATTTGGA
<i>VvPL13</i> -R (qRT-PCR)	CTGAACCAGTTGTTTGAGATGG
<i>VvPL14</i> -F (qRT-PCR)	AATTTTCAGGACTATGCATGGC
<i>VvPL14</i> -R (qRT-PCR)	CAAGCACACAATCAGCTAGTTT
<i>VvPL15</i> -F (qRT-PCR)	TGAACTCCTTCAAGACCATTGA
<i>VvPL15</i> -R (qRT-PCR)	ACCGTCTGATATCGTCCTAAAC
<i>VvPL16</i> -F (qRT-PCR)	ACGGACTCATTGATGCAGTGT
<i>VvPL16</i> -R (qRT-PCR)	TCATCACTATGCCCCATGAGC
<i>VvPL15</i> -F (pRI)	ttgatacatatgccgctgacATGGCTAGCTCTTCACTTTCCCT
<i>VvPL15</i> -R (pRI)	agagttgttgattcagaattcTCAGCATCGAGAACCTTTCTTGC
<i>VvPL15</i> -F (TRV)	gtgagtaaggttaccgaattcATGCAGTCATCCAAGATGAGCC
<i>VvPL15</i> -R (TRV)	cgtgagctcggtaccggatccAGATATGGCTCCCACCAAAGATG
<i>AtActin2</i> -F	ATCAGCCGTTTTGAATCTCC
<i>AtActin2</i> -R	CAATCTAACTTCAACAGTTC

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