

DEFECTIVE EMBRYO AND MERISTEMS1 (DEM1) Is Essential for Cell Proliferation and Cell Differentiation in Tomato

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Table S1. DNA oligonucleotides used in this study. The 5′ to 3′ sequence of each DNA oligonucleotide used in this study for plant expression vector construction, SMD transformant analysis, RT-qPCR analysis, and Southern and northern blot hybridization analysis is listed below with the specific use of each DNA oligonucleotide provided in the Materials and Methods section.

Oligonucleotide Name	Target Sequence / Oligonucleotide Use	Sequence (5′ – 3′)
Plant Expression Vector Construction		
DEM1-PRO-F	<i>SIDEM1</i> promoter	GGGTGATCACTGCAGTAATTTATATTGACATAATGAAGGC
Ex1-R	<i>SIDEM1</i> exon-1	CCCTCTAGACCCATGAAAATTGAGCACTGCGGAAGCTT
3UTR-F	<i>SIDEM1</i> 3′ UTR	CCCTCTAGAACAATCATTCTGTTGATATATGCAACTTATTAG
3UTR-R	<i>SIDEM1</i> 3′ UTR	AGACTACTTGCAGTTAAGAAGGAGATAGAGGCT
Ex2-F	<i>SIDEM1</i> exon-2	GGGATCGATGGTCACCGAGAATGGGAAGCAAGAG
Ex2-F	<i>SIDEM1</i> exon-2	CCCTCTAGATCATATTTGTAAAGCGCCTGCTAGAG
NLS-F	<i>SIDEM1</i> NLS	GGGATCGATGGTTAACCATGATTTGAGGGAGGAGTTTGAGGAGGCA
SMD Transformant Analysis (mapping of <i>Ds</i> insertions into the <i>SIDEM1</i> locus)		
DEM5	<i>SIDEM1</i> 5′ terminus	TTTCTCCTCCTTAAATGCATTGAG
DEM3	<i>SIDEM1</i> 3′ terminus	TTCATGTTGGTGGAACACTGCGA
B34	<i>Ds</i> element (3′ region)	ACGGTCGGTACGGGATTTTCCCAT
B39	<i>Ds</i> element (5′ region)	GTTTTTCGTTTCCGTCCCGCAA
D71	<i>Ds</i> element (5′ region)	CCGTTACCGACCGTTTTTCATCCCTA
D73	<i>Ds</i> element (3′ region)	GAACGCGACATAATGGTTTCTGACG
Reverse Transcriptase Quantitative Polymerase Chain Reaction (RT-qPCR) Analysis		
TUB-RTF	<i>SITUB1</i> gene	CGATTCCGTTCTTGT
TUB-RTR	<i>SITUB1</i> gene	AATGAGTGACACACTTGAATCCTT
Ex2-RTF	<i>SIDEM1</i> exon-2	CGCTGTTTCTGACTCACCTGAA
Ex2-RTR	<i>SIDEM1</i> exon-2	GCCTGCTAGAGATGCTGAATGA
Probe Synthesis For Nucleic Acid Hybridization (Southern or Northern Blotting) Analysis		
OLI-DT15	mRNA poly-A tails	TTTTTTTTTTTTTTTT
DEM1-PF	<i>SIDEM1</i> cDNA	TTCAAATGGGTGCTAATCACAGC
DEM1-PR	<i>SIDEM1</i> cDNA	ATTGTTCAAATTTGTAAGCGCCT
DEM2-PF	<i>SIDEM2</i> cDNA	GAGAAATGTCCACCATGGAACCTCGTTG
DEM2-PR	<i>SIDEM2</i> cDNA	CCCTTTGTTTACGGATAAAGCTGGGAAG
DEM2-PF2	<i>SIDEM2</i> cDNA	CCCAGCTATATGCGCATCCACAGGAGTCAG
DEM2-PR2	<i>SIDEM2</i> cDNA	GGATTAAAGCTGACTCCTGTGGATGCG
PHAN-PF	<i>SIPHAN</i> cDNA	GGGGAATTCATGAGGAGAGGCAACGG
PHAN-PR	<i>SIPHAN</i> cDNA	GGGGGAAGTCGCGGCAAGTAGAAA
TKN1-PF1	<i>SITKN1</i> cDNA	CTTGATTTAGGGTTTTTTTTTCCCC

TKN1-PR1	<i>SITKN1</i> cDNA	GTGCTTAGGCCTATAAGGCTTGC
TKN1-PF2	<i>SITKN1</i> cDNA	GGGGAATTCATGGAGAATAATAATTATAATAATCATGTGTCTGG
TKN1-PR2	<i>SITKN1</i> cDNA	GGGGGATCCAAAATTCATAAATATTACTGACCCAAACGAAAAGG
TKN2-PF1	<i>SITKN2</i> cDNA	GATCACTTACACACACACACACCC
TKN2-PR1	<i>SITKN2</i> cDNA	GCTTGTACTACTACATGCACAC
TKN2-PF2	<i>SITKN2</i> cDNA	GGGGAATTCATGGAGGGTGGTTCTAGTGG
TKN2-PR2	<i>SITKN2</i> cDNA	GATCACTTACACACACACACACCC
BAR-R-PF	<i>BAR</i> gene	CGAGATAGGGTTGAGTGTGTTCC
BAR-R-PR	<i>BAR</i> gene	AGACAAGCACGGTCAACTTCCGTA
NPTII-PF	<i>NPTII</i> gene	GAATTAAGGGAGTCACGTTATGACC
NPTII-PR	<i>NPTII</i> gene	CAGAAGAACTCGTCAAGAAGGCG