

(A)

SCRp

(bp)
-1387 (AA)CAG**GTCC**AAAA (+)
-1154 (GT)CTT**GTCCA**ATT (+)
-1102 (CA)TTA**GTCC**CCTT (+)
-1067 (GT)TT**TGTCT**AAAT (+)
-489 (TG)TTC**GTCG**TTGT (-)
-343 (TG)AAT**GTCG**CTTC (-)
-312 (TC)TAA**GTCG**TCTT (-)
-287 (TC)ACT**GTCC**TCCT (+)
-278 (TC)CTC**GTCC**TCCT (+)
-27 (TG)TT**GTCG**TGAG (-)

(B)

SCL3p

(bp)
-2157 (AT)AAT**GTCG**GTGA (-)
-1971 (CA)TT**TGTCT**CGT (-)
-1513 (TT)TT**TGTCT**TCTT (-)
-1481 (TC)TT**TGTCT**TTTT (-)
-1458 (TC)ATT**GTC**TTTTC (-)
-1434 (GA)TT**TGTCT**GTCT (-)
-1333 (GT)TT**TGTCT**TTTGT (+)
-1312 (GA)AAC**GTCC**AAAC (-)
-607 (GT)TT**TGTCT**TCTT (-)
-598 (TG)ATA**GTCG**GTTT (-)
-584 (GC)ATT**GTC**TGGTA (+)

(C)

GA3ox1

(bp) (bp)
-2879 (AG)ATT**GTCG**TGAA (+) -1929 (TA)TAT**GTCC**ATTT (+)
-2791 (CA)CTA**GTCC**TTAA (-) -1899 (TT)ATT**GTC**TATTT (+)
-2765 (CG)TGG**GTCC**TTTA (-) -1511 (AT)TT**TGTCC**ACTA (-)
-2742 (TT)TT**TGTCT**TTTT (+) -1323 (AT)GT**GTCG**CTAG (-)
-2690 (GC)CAA**GTCG**GATA (+) -1217 (AT)AT**GTCG**TACG (+)
-2676 (TT)TT**TGTCT**TCTT (-) -1087 (TT)ATT**GTC**TATCT (+)
-2376 (AA)CTG**GTCC**GTCG (+) -855 (AT)G**TTC**TTGTA (-)
-2372 (GG)TCC**GTCG**AAAC (+) -818 (CT)TT**TGTCC**AAA (+)
-2350 (AT)GGG**GTCC**TTGA (+) -738 (CC)AC**AGTCG**CTGG (+)
-2320 (AT)TT**TGTCC**AAAA (+) -513 (TT)TT**TGTCT**CTTT (+)
-2202 (AA)TT**TGTCT**TTAA (+) -485 (TT)ATT**GTCC**CTTT (+)
-2123 (AA)TAG**GTCG**CGAA (+) -264 (TA)G**AGTCC**CGCC (-)
-2050 (AT)AAT**GTCC**TTTT (-) -185 (GT)TT**TGTCC**AATA (-)

(D) **PIN1**

(bp)

-1259 (AT)AAA**GTCC**GTAC (-)
 -935 (AT)AAG**GTCC**GAAAT (-)
 -513 (GC)GGA**GTCC**AAAG (-)
 -401 (TT)TTT**GTCC**GATT (+)
 -150 (TT)TTT**GTCC**GTTG (-)
 -52 (CT)TT**GTCT**TTAG (-)
 +10 (TA)GAA**GTCC**GCCG (-)
 +130 (GT)TTC**GTCC**GCTCT (+)
 +238 (TC)ATT**GTCC**TCTC (+)
 +294 (TT)ATG**GTCC**AATC (-)
 +318 (GG)AGT**GTCC**GAGAG (-)
 +385 (AT)GAG**GTCC**GCCG (-)
 +532 (AT)AAT**GTCC**GAAAT (-)
 +554 (AG)G**TTGTCT**TCCA (-)
 +614 (TG)TTC**GTCC**TTCT (+)

(E) **YUC5**

(bp)		(bp)
-2767	(TA)GGT GTCC ATTG (-)	-657 (AT)ATG GTCC AAAT (-)
-2733	(GA)TTG GTCC GTGGT (-)	-609 (GA)TTG GTCC ATTG (+)
-2662	(GC)TTC GTCC GAAAC (+)	-452 (TT)AGAG GTCC GTTT (-)
-2616	(TC)CT TTGTCT AATT (-)	-439 (TC)AAAG GTCC CATC (+)
-2451	(TT)ATT GTCC AGAA (+)	-212 (AC)TTC GTCC ACTA (+)
-1975	(CA)AGC GTCC GTTG (+)	38 (CT)TCT GTCC GAGG (-)
-1868	(CA)TTC GTCC GAAAG (+)	66 (TA)ACG GTCC TGTA (+)
-1833	(TT)TTT GTCC TTTA (-)	77 (TA)ATC GTCC GAGC (+)
-1783	(TT)TAG GTCC ATTT (-)	282 (GA)ACT GTCC TTTT (-)
-1708	(CA)GCAG GTCC GCCAG (+)	304 (CT)TGAG GTCC TACG (+)
-1486	(AT)CT TTGTCT CCTCAA (+)	350 (AG)TGT GTCC AGTC (+)
-1476	(CA)TT GTCT TTTTG (-)	368 (GT)CTC GTCC GATC (-)
-1390	(TA)TT GTCT GAAA (-)	373 (CA)CT TTGTCT CGTC (-)
-1378	(AA)TTC GTCC GATTT (-)	397 (AT)G TTGTCT TTGAT (-)
-1182	(GT)TGC GTCC GTGA (-)	421 (TC)GGG GTCC GAGA (+)
-1146	(TT)TTG GTCC ATCG (-)	460 (CT)CCC GTCC CCAC (-)

Figure S1. Sequences of candidates of IDD binding sequence in the promoter of (A) *SCR*, (B) *SCL3*, (C) *GA3ox1*, (D) *PIN1*, and (E) *YUC5*. Numbers indicate the nucleotide numbers from the ATG of each gene. GTC(G/C) are in green and MGP binding sequences are shown in blue. (+): sense, (-): anti-sense.

Table S1. Primers used in this study.

primer name	sequence
construction of vectors for yeast experiments	
AtiDD1 BamHI F	GGATCCGATGCCGGTTGATTTAGAT
AtiDD1 PstI R	CTGCAGCGAACTTCTTCCAATGTC
AtiDD2 BamHI F	GGGATCCGATGCCGGTAGATTTAGATAAC
AtiDD2 XhoI R	GCTCGAGTTATGATTTTCTTCTACTAATG
AtiDD3 EcoRI F	GAATTCATGACAACCTGAAGATCAGAC
AtiDD3 BamHI R	GGATCCTCAAATCCATCCATTGATAG
AtiDD4 EcoRI F	GGAATTCATGTCGTCATCATCATATAAC
AtiDD4 PstI R	GCTGCAGTCAACCTCTTCCAAATGG
AtiDD5 BamHI F	GGATCCGATGGCTGCTTCTTCATCC
AtiDD5 PstI R	CTGCAGGAACTCGCATGATGGAT
AtiDD6 BamHI F	GGGATCCGGATGTCTTCATCGTACAAC
AtiDD6 Sall R	GGTCGACTCAAGCTTTGCCATATG
AtiDD7 EcoRI F	GGAATTCATGATGATGAACAGAGAC
AtiDD7 BamHI R	GGGATCCTTAATCTTGGTGGCTATG
AtiDD8 BamHI F	GGATCCGATGACAAGTGAAGTTCTT
AtiDD8 PstI R	CTGCAGAATCCATCCATTGATAGA
AtiDD9 BamHI F	GGATCCGATGATGATGCCAGATGAT
AtiDD9 PstI R	CTGCAGCTGGTTCATGTCGGCGGT
AtiDD10 BamHI F	GGATCCCAGTGCAGATGATCCAGGA
AtiDD10 PstI R	CTGCAGTCAACCAATGGAGCAAACC
AtiDD11 EcoRI F	GGAATTCATGTTACTTCCACAGCATC
AtiDD11 PstI R	GCTGCAGCTATCCCTGCCAAGGCTTTG
AtiDD12 BamHI F	GGGATCCGGATGTTTTCTTCTCATTCTTG
AtiDD12 PstI R	GCTGCAGTTACATACGATGGGCCCTG
AtiDD14 EcoRI F	GAATTCATGATAGACTACGAGAGAAG
AtiDD14 PstI R	CTGCAGCTATGAAGATGCTCTATC
AtiDD15 EcoRI F	GAATTCATGAGAACAGATCAAGTG
AtiDD15 BamHI R	GGATCCAAAACCATTTTCCAACCTC
AtiDD16 EcoRI F	GGAATTCATGATACATTACGAACAAAAC
AtiDD16 PstI R	CTGCAGTCACTCGCATTCTCCTTC
OsiD1 EcoRI F	GGAATTCCTAGAAGTTGTGGCTCCAC
OsiD1 Sall R	GGTCGACATGGCGGCGGCGCAGGAG
SHR EcoRI F	GAATTCATGGATACTCTCTTTAGACTA
SHR Sall R	GTCGACTTACGTTGGCCGCCACGCACT
SCL3 EcoRI F	GGAATTCATGGTGGCTATGTTTCAAG
SCL3 BamHI R	GGGATCCTCACTTCTCGCATCTCCAAG
GAI EcoRI F	GGAATTCATGAAGAGAGATCATC
GAI BamHI R	GGGATCCCTAATTGGTGGAGAGTTTCC
RGA BamHI F	GGATCCGATGAAGAGAGATCATCAC
RGA PstI R	CTGCAGTCAGTACGCCGCCGTCGAG
RGL1 BamHI F	GGGATCCCAGTGAAGAGAGAGACAACCAC
RGL1 Sall R	GGTCGACTTATTCCACACGATTGATTC
RGL2 Sall F	GGTCGACCGATGAAGAGAGGATACGGAGAAAC
RGL2 PstI R	GCTGCAGTCAGGCGAGTTTCCACGCCG
RGL3 Sall F	GGTCGACGATGAAACGAAGCCATCAAG
RGL3 PstI R	GCTGCAGCTACCGCCGCAACTCCGCCG
SLR1 EcoRI F	GGAATCCATGAAGCGCGAGTACCAAG
SLR1 SmaI R	GCCCGGGTCACGCCGCGGCGACGCGCC
PIN1p a EcoRI F	GGAATTCATACATTCAAAAAACTTC
PIN1p a XhoI R	GCTCGAGGAGCATTGGTCTGGTGTG
PIN1p b EcoRI F	GGAATTCGGCATAAACCGTTTCGTC
PIN1p +650 BamHI R	GGGATCCGTAATATCAGACCTTGAAG
YUC5p a KpnI F	GGGTACCCAAAAGGAGATAATCTTC
YUC5p a XhoI R	GCTCGAGCCTATAATTATAAATTTG
YUC5p b KpnI F	GGGTACCTAGGTTTACTCTAAATAG
YUC5p b XhoI R	GCTCGAGGCTTTATGGTATATATTG
YUC5p c KpnI F	GGGTACCAAGCAATTATATTATAATC
YUC5p c XhoI R	GCTCGAGTCCATCTTTAGGGGTGAG
YUC5p d KpnI F	GGGTACCGAGAACATGTTTAGGCTC
YUC5p +500 Sall R	GGTCGACGATCTCTGGAACAACCTTC

primer name	sequence
construction of vectors for transient assay	
AtIDD1 XbaI F	GTCTAGAATGCCGGTTGATTTAGATAA
AtIDD1 BamHI R	GGGATCCTTACGAACCTTCTCCAATGTC
AtIDD6 XbaI F	GCTCTAGAATGTCTTCATCGTACAACAC
AtIDD6 BamHI R	GGATCCTCAAGCTTTGCCATATGG
AtIDD10 XbaI EcoRI F	GCTCTAGAGAATTCATGCAGATGATTCCAGGAG
AtIDD10 XhoI R	GCCTCGAGTCAACCCAATGGAGCAAACC
AtIDD15 BamHI F	GGGATCCATGAGAACAGATCAAGTGATG
AtIDD15 SacI R	GGAGCTCTTAAAAACCATTTTCCAATC
AtIDD16 XbaI F	GCTCTAGAATGGAGCTGACGCAACCC
AtIDD16 BamHI R	GCGGATCCTCACTCGCATTCTCCTTC
SHR EcoRI F	GAATTCATGGATACTCTCTTTAGACTA
SHR Sall R	GTCGACTTACGTTGGCCGCCACGCACT
SCR EcoRI F	GAATTCATGGCGGAATCCGGCGATTTTC
SCR BamHI R	GGATCCCTAAGAACGAGGCGTCCAAG
SCL3 Sall F	GGTCGACATGGTGGCTATGTTTCAAG
SCL3 XbaI R	GTCTAGAATGGTGGCTATGTTTCAAG
RGA XbaI F	GTCTAGAATGAAGAGAGATCATCCAATTCCAAG
RGA BamHI R	GGGATCCTCAGTACGCCGCCGTGAGAGTTTCCAAGC
SCRp HindIII F	AAGCTTACAAAAGTCTAAAAATTG
SCRp NcoI R	GCCCATGGGGAGATTGAAGGGTTGTTGG
SCL3p -2549 HindIII F	GAAGCTTTTGTAAACGAAGTCTGTTGTTTC
SCL3p -2266 HindIII F	GAAGCTTAATGAAGTCTTTTATAAG
SCL3p -1987 HindIII F	GAAGCTTGTATACACAAAAGCTACG
SCL3p -1708 HindIII F	GAAGCTTTATGGATGCATATTTTTC
SCL3p -1655 HindIII F	GAAGCTTAAAAAAAAGTTGAGGTAC
SCL3p -1600 HindIII F	GAAGCTTTCTCTCTGGTCAATGGTC
SCL3p -1540 HindIII F	GAAGCTTAAAAACAAGAGAGAGAG
SCL3p -1485 HindIII F	GAAGCTTGAAGAAAAGACAAAAGAG
SCL3p -1470 HindIII F	GAAGCTTGAGAAAAGTAATGAAAAG
SCL3p -1453 HindIII F	GAAGCTTGACAATGAACATTTAAAG
SCL3p -1437 HindIII F	GAAGCTTAGAAGACAGACAAATCCC
SCL3p -1422 HindIII F	GAAGCTTCCCACACCCAAGCCTCAG
SCL3p -992 HindIII F	GAAGCTTGGTGAACTTCTCTTATC
SCL3p -425 NcoI R	GCCATGGGGTTCTCTCAATCTTTATCTC
SCL3p mutant 1 F	AGAGAAAAGTAATGAAAAGAACATTT
SCL3p mutant 1 R	TGCTTCTTTAAATGTTCTTTTCAT
SCL3p mutant 2 F	AAGTAATGAAAAGACAATTTAAAGAA
SCL3p mutant 2 R	TTTGTCTGTCTTCTTTAAATTGTCT
SCL3p mutant 3 F	AGTAATGAAAAGACAATGGAAGACA
SCL3p mutant 3 R	TGGGATTTGTCTGTCTTCCATTGTCT
GA3ox1p HindIII F	GAAGCTTTAATGACACACAGTCACAC
GA3ox1p Sall R	GTCGACCTTGCTCTTTTTTAATTAG
PIN1p Sall F	GGTCGACTCCTCATTATATCATCAACC
PIN1p BamHI R	GGGATCCGTAATATCAGACCTTGAAG
YUC5p PstI F	GCTGCAGCTACAACACAAAAGGGAGC
YUC5p Sall R	GGTCGACGATCTCTGGAACAACTTTC