Supporting Information

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SI Materials and Methods

Mutant Characterization. Germination assays were performed on filter paper as described (1) using 3-mo-old seeds harvested at the same time. Germination was scored by seed coat rupture after 8-d incubation under constant light at 22 °C. For root and hypocotyl elongation assays, seeds were plated on 0.5× MS media and 1% sucrose \pm paclobutrazol (PAC) or gibberellins (GA). After 4 d at 4 °C in the dark, the square plates were placed vertically in continuous light at 22 °C. For assays of the etiolated seedlings, the plates (after 24 h in the light) were incubated in the dark at 22 °C until measurement on day 6. Root and hypocotyl lengths were measured with the aid of ImageJ software (http://rsbweb.nih.gov/ij/). No less than 30 seedlings were measured for each genotype. For phenotype analysis of soil-grown plants in the ga1-3 background, seeds were imbibed in 100 µM GA₃ for 3 d at 4 °C and then washed thoroughly with water before planting in soil.

Plasmid Construction. Sequences of primers used in this study are listed in Table S1. The PCR-amplified fragments in all constructs were analyzed by DNA sequence analysis to ensure that no mutations were introduced.

Constructs for expression of SCARECROW-LIKE 3 in transgenic Arabidopsis. For making SCARECROW-LIKE 3 SCL3-OE [Cauliflower Mosaic Virus (CaMV) 35S promoter: SCL3 cDNA] and 35S:SCL3-GFP, a full-length coding region of SCL3 cDNA was amplified by PCR using primers SCL3 GF1 and SCL3 GR. The amplified DNA was then inserted into pENTR/D-TOPO (Invitrogen) followed by site-directed recombination to enter the binary vectors pGWB2 and pGWB5 for SCL3-OE and 35S:SCL3-GFP, respectively (2). For making P_{SCL3}:SCL3, a 5.3-kb genomic DNA fragment carrying the SCL3 gene, including a promoter region (2,783 bp) and a 3' downstream region (383 bp), was amplified by PCR with primers SCL3 GWP F1 and SCL3 3' Rev using a plasmid clone containing a 6.2-kb EcoRI SCL3 genomic DNA fragment derived from a BAC clone (F11F12; GenBank accession no. AC012561.2) as a template. The amplified DNA fragment was then inserted into pENTR/D-TOPO (Invitrogen) followed by site-directed recombination to enter the binary vector pGWB1 (2). P_{SCL3}:SCL3-GFP is a plasmid that contains 4-kb SCL3 genomic DNA (including ~2.5 kb upstream sequence from the ATG start site of SCL3 and the full-length SCL3 coding sequence) fused to GFP (3).

Constructs for coimmunoprecipitation. To make 35S:HA-RGA (pEG201-RGA), the RGA cDNA sequence was amplified by PCR using primers 224 and 536 and then inserted into pENTR 1A (Invitrogen) by BamHI/NotI digestion followed by site-directed recombination to enter binary vector pEarleyGate201 (4). To make 35S:cMyc-SCL3 (pEG203-SCL3), the SCL3 coding sequence was PCR-amplified with primers SCL3-GW-N(C)5 and SCL3-GW-N3 and then introduced into the pCR8/GW/TOPO gateway vector (Invitrogen) by topo cloning followed by site-directed recombination to enter pEarleyGate203 (4). To make 35S:cMyc-GUS-NLS (pEG203-GUS-NLS, a negative control), the coding sequence of GUS (β -glucuronidase) was PCR-amplified from pBI101 vector using primers GUS-11 and GUS-12 to create GUS-SV40 NLS (5). This GUS-NLS fragment was cloned into pCR8/GW/TOPO vector and then into pEG203 by recombination.

Constructs for bombardment transient expression. Reporter constructs are derived from plasmids pRAB-5 and p35S:Renilla-luciferase (*35S:rLUC*) that have been described before (6, 7). The firefly luciferase (*fLUC*) gene from pRAB-5 was excised using the re-

in pFGC5941 (http://www.chromdb.org/rnai/pFGC5941.html) to generate a 35S-TMV- Ω -LUC construct that includes the Ω leader sequence of the Tobacco Mosaic Virus (TMV). This construct was designated pRZ500. A DNA fragment of the SCL3 promoter was amplified from Col-0 genomic DNA by PCR with primers SCL3-prom-RI-Swa-F and SCL3-prom-Xho-R, restriction digested with EcoRI and XhoI, and cloned into the same sites of pRZ500. The resulting plasmid was cut with SwaI and NcoI to recover the 1-kb SCL3 promoter fragment that includes the TMV- Ω leader sequence and was cloned into the polylinker of pRAB-5 to generate plasmid pRZ506 (SCL3-1kb-LUC). DNA fragments of the promoters of GA3ox1 and GA20ox2 were PCR-amplified with primer pairs 30x1-prom-Swa-F and 30x1-prom-Xho-R and 20ox2-prom-RI-Swa-F and 20ox2-prom-Xho-R, respectively. The PCR products were digested with SwaI and XhoI and cloned into the same sites in pRZ506, replacing the SCL3 promoter. The new plasmids were designated pRZ507 (GA20ox2-LUC) and pRZ511 (GA3ox1-LUC). A 2-kb SCL3 promoter construct was obtained by amplifying a DNA fragment from genomic DNA with primers SCL3-1900prom-H3-F and SCL3-prom-Xho-R. The resulting PCR product was cut with HindIII and XhoI and cloned into the same sites of pRZ506, replacing the 1-kb promoter with the 2-kb PCR product and generating plasmid pRZ535 (SCL3-2kb-LUC). Replacement of the SCL3 TATA box with the 35S promoter TATA box was done in two steps. A PCR product was generated using pRZ500 as a template and primers 35S-minimal-BHI-RV and LUC-750-R; the resulting PCR product was cut with EcoRV and SphI and cloned into the same sites in pRAB-5, generating plasmid pRZ516 (35S-minimal-LUC). Subsequently, a SCL3 promoter fragment lacking the putative TATA box was obtained by PCR using pRZ535 as a template and primers SCL3-1900prom-H3-F and SCL3p-100-BHI-R. The PCR product was cut with HindIII and BamHI and cloned into the same sites of pRZ516,

striction enzymes NcoI and XbaI and cloned into the same sites

generating the construct pRZ536 (SCL3-2kb+TATA-LUC). Effector constructs are derived from pRTL2 (35S-Empty) and pRTL2-mGFP that were provided by Jim Carrington (8, 9). The mGFP sequence in pRTL2-mGFP was substituted with the coding sequence of *RGA* as an NcoI and BgIII fragment to generate pRG37 (35S:RGA). To create pRZ530 (35S:SCL3), the coding sequence of *SCL3* was PCR-amplified from a cDNA clone using primers SCL3-NcoI-F and SCL3-XbaI-R cloned into pCR2.1 (Invitrogen); it was subsequently cut with XbaI and partially digested with NcoI to recover the full-length coding sequence. The fragment was then ligated into the same sites in pRTL2 (9).

Constructs for yeast two-hybrid. For making SCL3-DB (pSCL3-1), the coding sequence of *SCL3* was amplified from Col-0 genomic DNA by PCR using primers SCL3-1 and SCL3-2, cut with EcoRI and BamHI, and inserted into the DNA-BD vector pLexA-NLS. Sequencing results indicated that there were two silent mutations ($^{138}A \rightarrow ^{138}G$ and $^{1263}C \rightarrow ^{1263}T$) in the coding sequence of *SCL3* gene. To make SCL31-AD, the coding sequence of *SCL31* (At1g07520) was PCR-amplified from a BAC clone (F22G5) using primers SCL31-3 and SCL31-2. The PCR fragment was first cloned into pCR8/GW/TOPO cloning vector (Invitrogen), and the *SCL31* coding sequence was then subcloned into NcoI and EcoRI sites of the prev vector pACT II. RGA-AD, GAI-AD, RGL1-AD, RGL2-AD, and RGL3-AD plasmids were made previously (1, 10).

Constructs for expressing recombinant SCL3 proteins. The coding sequence of SCL3 in pSCL3-1 was excised by EcoRI/BamHI digestion and subcloned into the same sites of pMAL-c2 (NEB). The construct was designated pMBP-SCL3.

To make the GST-SCL3 fusion construct, the *SCL3* coding sequence was amplified using PCR primers SCL3 CDS-5 (BamHI) and SCL3 CDS-3 (SaII); after digestion with BamHI/SaII, the PCR fragment was cloned into the same sites of pGEX-KG. The final construct was designated pGEX-SCL3, in which the GST-SCL3 fusion gene was placed under the control of the inducible *tac* promoter.

In Vitro Pull-Down Assays. The assay was performed as described before (11) with the following modifications. Both recombinant GST and GST-SCL3 were expressed in *Escherichia coli* TB1 (NEB), and ~8 μ g recombinant proteins together with the glutathione Sepharose 4B beads (GE Healthcare) were used for the pulldown assay. Five grams of 10-d-old *sly1-10* and *rga-24 sly1-10* (in the Ler background) were used as starting material. The final pull-down protein samples were separated by a 6% SDS/PAGE gel and immunoblotted with affinity-purified anti-RGA antibodies (DU176) as described (12). Signal was detected by SuperSignal West Dura chemiluminescent substrate (Thermo Scientific Pierce).

Transient Expression in Nicotiana benthamiana by Agro-Infiltration and Coimmunoprecipitation of SCL3 and RGA. The transient expression constructs in pEarleyGate were transformed into agrobacterium GV3101. After overnight growth, agrobacterium cells were incubated in induction media (60 mM K₂HPO₄, 33 mM KH₂PO₄, 7.6 mM (NH₄)₂SO₄, 2 mM sodium citrate, 1 mM MgSO₄, 0.2% glucose, 0.4% glycerol, 10 mM MES, 50 µg/mL acetosyringone, pH 5.6) with antibiotics (50 µg/mL Kanamycin and 50 µg/mL Gentamicin) for 4 h. Cells were then resuspended in infiltration media (0.5× MS, 10 mM Mes, 150 µg/mL acetosyringone, pH 5.6) without antibiotics. Agrobactium strains carrying different expression constructs were mixed to make final $OD_{600} \sim$ 0.8 for each strain and infiltrated into 5-wk-old N. benthamiana leaves by needle-less syringe; 72-h transiently transformed N. benthamiana leaves were cross-linked in 1% formaldehyde for 15 min by vacuum infiltration. Coimmunoprecipitation (co-IP) was performed using nuclear proteins extracted from cross-linked N. benthamiana leaves. Nuclear protein extracts were first diluted 10-fold in 1× PBS and 0.5% Triton X-100 with plant protease inhibitor mixture (P9599; Sigma) and then, incubated with 10 µL anti-cMyc agarose-conjugated beads (A7470; Sigma) for 90 min at 4 °C. After four washes with 1× PBS with protease inhibitors, proteins were eluted by boiling for 5 min in 2x Laemmli buffer and analyzed by SDS/PAGE and immunoblotting using monoclonal anti-cMyc antibody (MMS-150P; Covance) or monoclonal anti-HA antibody (MMS-101P; Covance) as primary antibodies. HRPconjugated donkey anti-mouse antibody (Jackson ImmunoResearch) was used as secondary antibody. The blots were incubated in Supersignal Dura Reagent for chemiluminescence detection.

Transient Expression Assays by Particle Bombardment of Arabidopsis Seedlings. Surface-sterilized seeds were placed on 60×15 -mm Petri dishes containing MS medium and incubated under constant light at 22 °C for 11–14 d. Particle bombardment was carried out using the PDS-1000/He particle gun delivery system (Bio-Rad Laboratories) as described previously (7), except that, instead of detached leaves, whole seedlings were used. Mixtures of plasmids were prepared using DNA molar ratios of 5:3 (reporters:effectors). When an effector construct was omitted, a similar molar amount of pRTL2 (35S-Empty Control) was included in the DNA mixture. Plasmid 35S:rLUC was included as a control of transformation. Each DNA mixture was bombarded to two different plates, and two samples were collected from each plate. After bombardment, the Petri dishes were sealed again and returned to the growth chamber for 20 h. A dual-luciferase reporter assay (DLRA) system (Promega) was used to test for promoter activity. Firefly and Renilla LUC activities were measured with a fusion α -FP HT universal plate reader (Perkin-Elmer). Relative promoter activity was calculated as the ratio of fLUC to rLUC activities for each sample. The average of three or four replicates was used for each treatment.

ChIP-qPCR. The ChIP was performed as described previously (13, 14) with some modifications. Briefly, 7.5 g 10-d-old seedlings of scl3-1 (control) and scl3-1 P_{SCL3}:SCL3-GFP were fixed for 15 min in 1% formaldehyde by vacuum infiltration. Nuclei were isolated and followed by sonication using a Digital Sonifier S-250D (Branson Ultrasonics) to obtain DNA fragments around 0.5-1 kb. After preclarification with BSA equilibrated Protein A agarose beads (Upstate), sonicated chromatin was incubated at 4 °C over night with anti-GFP ab290 (Abcam). The GFP antibody, together with associated protein-DNA complex, was then pulled down by incubating with Protein A agarose beads for 6 h at 4 °C with rotation. The beads were then washed as described by Bowler et al. (13). Elution and cross-linking reversal was done by boiling the beads for 10 min in 500 µL freshly made elution buffer (100 mM NaHCO₃, 0.1% SDS) followed by 1 h incubation at 45 °C with 200 mM NaCl, 10 mM EDTA, 40 mM Tris-HCl pH 6.5, and 0.1 mg/mL proteinase K. The chromatin was precipitated by ethanol after phenol/chloroform extraction. The purified DNA was resuspended in 200 µL TE (10 mM Tris-HCl pH 8.0, 1 mM EDTA) buffer.

For promoter scanning of the SCL3, GA20ox1, GA20ox2, and GA20ox3 genes, different regions of each promoter were examined by ChIP-qPCR assay. Primers used for the assay are listed in Table S1. All qPCR reactions were carried out using the LightCycler SYBR Green I Fast Start DNA kit (Roche). Reactions were performed with 1 μ L immunoprecipitated DNA as template, and samples from *scl3-1* control line and *scl3-1* P_{SCL3}: SCL3-GFP transgenic line were compared. The amount of 18S rRNA gene from the ChIP samples was quantified by qPCR (1) to normalize the results between the control and test samples. The copy numbers of the SCL3-GFP transgene and its corresponding promoter regions were determined by real-time qPCR using genomic DNAs of the transgenic line *scl3* P_{SCL3}: SCL3-GFP and the *scl3* mutant as template. Student *t* tests were performed using the statistical package SPSS version 17.0.

Generation of Anti-SCL3 Antibodies and Immunoblot Analysis. The purified maltose binding protein (MBP)-SCL3 fusion protein from pMBP-SCL3 was used to raise polyclonal anti-SCL3 antibodies in rat (Cocalico Biologicals). The anti-SCL3 crude antiserum (DU-R24) was affinity-purified by GST-SCL3 fusion proteins using Affi-gel Blue gel followed by Affi-gel 15 (Bio-Rad). The endogenous SCL3 protein from different GA mutants was detected by using affinity-purified DU-R24. The immunoblot analysis procedure was similar to the protocol described before (12), except that 1× TBS buffer (50 mM Tris HCl, pH 7.5, 150 mM NaCl, 0.05% Tween 20) was used (instead of PBS) in the entire procedure, and 5% milk was omitted when blotting with primary (DU-R24) and secondary antibodies (donkey antirat; Jackson ImmunoResearch Laboratory). The DU-R24 will not be available for distribution after publication, because the titer of DU-R24 is extremely low.

Yeast Two-Hybrid Assays. The LexA-based yeast two-hybrid (Y2H) assay using the yeast strain L40 was performed as described (10). For 3-AT assay, various concentrations of 3-AT (0, 1, 2, 5, 10, 30, and 60 mM) were mixed in synthetic complete medium lacking Trp, Leu, and His. For each combination, 2 μ L yeast cells with OD₆₀₀ values of 0.25, 0.125, and 0.05, respectively, were spotted on media plates.

- 1. Tyler L, et al. (2004) Della proteins and gibberellin-regulated seed germination and floral development in Arabidopsis. *Plant Physiol* 135:1008–1019.
- Nakagawa T, et al. (2007) Development of series of gateway binary vectors, pGWBs, for realizing efficient construction of fusion genes for plant transformation. J Biosci Bioeng 104:34–41.
- Heo J-O, et al. (2010) Funneling of gibberellin signaling by the GRAS transcription factor SCARECROW-LIKE 3 in the Arabidopsis root. Proc Natl Acad Sci USA, 10.1073/pnas.1012215108.
- Earley KW, et al. (2006) Gateway-compatible vectors for plant functional genomics and proteomics. *Plant J* 45:616–629.
- Kalderon D, Roberts BL, Richardson WD, Smith AE (1984) A short amino acid sequence able to specify nuclear location. *Cell* 39:499–509.
- Matsuo N, Minami M, Maeda T, Hiratsuka K (2001) Dual luciferase assay for monitoring transient gene expression in higher plants. *Plant Biotechnol* 18:71–75.
- 7. Yamakawa S, et al. (2004) Systematic transient assays of promoter activities for leafspecific genes identified by gene-expression profiling with cDNA microarrays in *Arabidopsis thaliana. J Biosci Bioeng* 98:140–143.
- Schaad MC, Jensen PE, Carrington JC (1997) Formation of plant RNA virus replication complexes on membranes: Role of an endoplasmic reticulum-targeted viral protein. *EMBO J* 16:4049–4059.

- Carrington JC, Freed DD, Oh CS (1990) Expression of potyviral polyproteins in transgenic plants reveals three proteolytic activities required for complete processing. *EMBO J* 9:1347–1353.
- Dill A, Thomas SG, Hu J, Steber CM, Sun T-p (2004) The Arabidopsis F-box protein SLEEPY1 targets GA signaling repressors for GA-induced degradation. *Plant Cell* 16:1392–1405.
- Griffiths J, et al. (2006) Genetic characterization and functional analysis of the GID1 gibberellin receptors in Arabidopsis. *Plant Cell* 18:3399–3414.
- 12. Silverstone AL, et al. (2001) Repressing a repressor: Gibberellin-induced rapid reduction of the RGA protein in Arabidopsis. *Plant Cell* 13:1555–1566.
- Bowler C, et al. (2004) Chromatin techniques for plant cells. *Plant J* 39:776–789.
 Cui HC, et al. (2007) An evolutionarily conserved mechanism delimiting SHR
- movement defines a single layer of endodermis in plants. *Science* 316:421–425. 15. Zentella R, et al. (2007) Global analysis of della direct targets in early gibberellin
- signaling in Arabidopsis. Plant Cell 19:3037–3057. 16. Poullet P, Tamanoi F (1995) Use of yeast two-hybrid system to evaluate Ras interactions
- with neurofibromin-GTPase-activating protein. *Methods Enzymol* 255:488–497.
- Bolle C (2004) The role of GRAS proteins in plant signal transduction and development. *Planta* 218:683–692.
- Dill A, Sun T (2001) Synergistic derepression of gibberellin signaling by removing RGA and GAI function in Arabidopsis thaliana. Genetics 159:777–785.



Fig. S1. Expression profile of SCL3 and phenotypes of scl3 and SCL3-OE lines. (A) DELLA induces both SCL3 mRNA and protein accumulation. (Upper) Both SCL3 mRNA and protein levels are increased in ga1-3 and rga-Δ17 and reduced by rga-24 and gai-t6 null mutations. Relative SCL3 transcript levels in 8-d-old seedlings (15) are listed above the blot. For immunoblot assays, proteins were extracted from roots of 8-d-old WT (Ler) and different GA mutants. All mutants except scl3 are in the Ler background. Immunoblot analyses were carried out using affinity-purified antibodies against SCL3 and RGA, respectively. The histone proteins detected with antihistone H3 antibody (ab1791; Abcam) served as a loading control. (Lower) RGA proteins accumulate to higher levels in the Ler background than in the Col-0 background (WT and sc/3 mutant). This explains why RGA was not detected in sc/3 (in the Col-0 background) in Upper. Proteins were extracted from roots of 8-d-old sc/3, Col-0, and Ler, respectively. Immunoblot analysis was carried out using affinity-purified anti-RGA antibodies. A longer exposure time (than in Upper) was needed to detect the RGA protein in sc/3 and Col-0. (B) SCL3 in WT (Col-0) is expressed highest in germinating seeds and seedlings. Data represent the average of three qRT-PCR measurements ± SE. The housekeeping gene Actin 11 (At3g12110), whose expression remains similar in different tissues, was used to normalize different samples. The tissue with the lowest SCL3 expression (rosette leaves) was arbitrarily set to 1. Seed, germinating seeds; seedling, 10-d-old seedlings; root, from 10-d-old seedlings; rosette, rosette leaves of 5-wk-old plants; cauline, cauline leaves; flower, flower clusters; silique, siliques; stem, stem tissue only, with all leaves and inflorescences removed. (C) P_{SCL3}:SCL3 rescued sc/3 root phenotype (14-d-old seedlings). (Upper) The P_{SCL3}:SCL3 genomic DNA construct. (Lower) The scl3 root phenotype was rescued by P_{SCL3}:SCL3 in the presence of 0.5 µM uniconazole, a GA biosynthesis inhibitor with similar effect as PAC. (D) Overexpression of SCL3 caused longer root phenotype. Col-0, scl3, and four independent SCL3-OE lines were subjected to root-length assay in the absence (Upper) or presence (Lower) of 1 µM PAC as in Fig. 1B. Root lengths were measured on day 7. (E) Overexpression of SCL3 caused longer hypocotyl phenotype. Hypocotyl elongation assays in response to 1–10 μM GA₄ were performed using WT, scl3, and SCL3-OE line (#5) as in Fig. 1D. The x axis is on a log scale.





D
Б.

Line	Rosette diameter (mm)	Days to flower	Plant height (cm, d65)
ga1-3	26.6 ± 0.3^{a}	41.5 ± 0.5	ND
ga1-3 scl3	21.3 ± 0.4^{a}	46.7 ± 0.6	ND
ga1-3 rga-28	41.7 ± 0.5^{b}	30.8 ± 0.3	16.9 ± 0.2
ga1-3 rga-28 scl3	33.1 ± 0.5 ^b	33.0 ± 0.3	12.5 ± 0.2



Fig. S2. Genetic and protein-protein interactions between SCL3 and RGA/SPY. (A) rga and spy are epistatic to sc/3 in root elongation assays. Root lengths were measured on day 10. (B) rga is partially epistatic to sc/3 in regulating rosette leaf expansion, flowering time, and stem elongation. a, the rosette diameters of ga1-3 and ga1-3 scl3 plants were measured on day 58; b, the rosette diameters of ga1-3 rga-28 and ga1-3 rga-28 scl3 plants were measured on day 37. (C) SCL3-GFP fusion proteins are nuclear-localized. A root segment of transgenic plant containing 35S:SCL3-GFP (in the rga-24 ga1-3 background) was imaged by confocal microscopy. (D) Weak interactions between SCL3 and DELLAs in yeast two-hybrid assays. SC-TL, synthetic complete medium lacking Trp and Leu; SC-TLH, synthetic complete medium lacking Trp, Leu, and His; 3-AT, a competitive inhibitor of His3 enzyme. For each strain, 2 µL yeast cells with OD₆₀₀ values of 0.25, 0.125, and 0.05, respectively, were spotted on media plates. The triangle symbols indicate serial dilutions of yeast cells. Red colonies indicate more robust growth, because the host strain is ade2; a red color intermediate of the adenosine biosynthesis pathway accumulates when the colony grows to saturation (16). SCL3 showed a weak interaction with RGA and GAI in the SC-TLH media (0 mM 3-AT). As shown in the SC-TLH panel, RGL1, RGL2, and RGL3 alone (in the prey vector) self-activated the His3 reporter gene. RGL1 showed a weak interaction with SCL3 in the presence of 1 mM 3-AT. No interaction could be detected between SCL3 and the other two DELLAs (RGL2 and RGL3). SCL31, a GRAS protein that is divergent from both the DELLA subfamily and SCL3 (17), did not show any interaction with SCL3, suggesting that SCL3–DELLA interactions are specific.



Fig. S3. SCL3 interferes with RGA to regulate *SCL3* promoter in transient expression studies. (A) Schematics of the internal control, reporter, and effector constructs. The firefly luciferase gene (*fLUC*) was placed under the control of different versions of *SCL3* promoter (P_{SCL3} :*fLUC*: 1, 2, and 2 kb + TATA) serving as reporter constructs. The 1- and 2-kb *SCL3* promoter constructs also contain 68 bases of the 5' UTR. The third reporter construct (same as in Fig. 3) has the 2-kb promoter, but its –100 to ~+1 region was replaced by the CaMV minimal promoter (-45- to ~+1-bp region that includes the TATA box). *35S:Renilla LUC (rLUC)* served as an internal control for normalization of transformation efficiency; *35S:RGA* and *35S:SCL3* served as two effector constructs, respectively. The empty vector was used as a control in the transient coexpression assay. (*B*) The 2-kb *SCL3* promoter with the CaMV TATA sequence showed enhanced expression and remained responsive to RGA. *P_{SCL3}:fLUC* and *35S:rLUC* constructs were cobombarded into 14-d-old *ga1-3 rga-24 gai-t6* seedlings (in the Ler background) (18) with the empty effector constructs (Control) or *35S:RGA* using the same molar ratios. The relative fLUC activity of *SCL3*-1kb was set to 1. Data represent the average value ± SE of three replicates. (*C* and *D*) The construct *P_{SCL3}:fLUC* (with 1-kb *SCL3* promoter) and the internal control *35S:rLUC* were cobombarded into 12-d-old *ga1 rga gai* seedlings with various effector construct, respectively, using the same molar ratio. The average fLUC activity of the control was set to 1. Data represent the average value ± SE of four replicates. Pair-wise *t* tests were performed. (*B*) ***P* < 0.01; **P* < 0.05. (*D*) When two samples show different letters (a–b) above the bars, the difference between them is significant (*P* < 0.05).



Fig. 54. Copy number of *SCL3* sequence in the *scl3* P_{SCL3} -*SCL3*-*GFP* line and promoter scanning of GA biosynthetic genes. (A) qPCR analysis of the copy numbers of each indicated region in the *scl3* P_{SCL3} :*SCL3*-*GFP* line (Fig. 4). The genomic DNAs of the transgenic line *scl3* P_{SCL3} :*SCL3*-*GFP* and the *scl3* P_{SCL3} :*SCL3*-*GFP* and the *scl3* P_{SCL3} :*SCL3*-*GFP* and the *scl3* P_{SCL3} :*SCL3*-*GFP* line (Fig. 4). The genomic DNAs of the transgenic line *scl3* P_{SCL3} :*SCL3*-*GFP* and the *scl3* gene (Fig. 4). The only exception was that a primer pair flanking the stop codon of the native *SCL3* gene can amplify the endogenous *SCL3* gene sequence but not the P_{SCL3} :*SCL3*-*GFP* transgene (+1,307 to ~+1,646). The fold change of the *SCL3*-*GFP* line was normalized to the control *scl3*. (*B*-*E*) Promoter scanning of *GA3ox1* (*B*), *GA20ox1* (*C*), *GA20ox2* (*D*), and *GA20ox3* (*E*) by ChIP-qPCR. Chromatin preparations of the comparing with the control *scl3*. The values of fold enrichment are the average ± SE of three qPCR reactions from two independent ChIP experiments. (*A*-*E*) The numbers underneath each bar indicate base pairs upstream of the ATG of each gene. A plus sign indicates base pairs downstream of the ATG.

Table S1. List of primers and their uses

PNAS PNAS

Primer	Sequence	Use	Notes
T-DNA analysis			
SALK 002516 LP	TTCCTCTGTTCTTTAACCCCC	Genotyping SC/ 3	WT allele 998-bp
SALK 002516 BP		denotyping sees	PCR product
		Construction col2 1	Mutant allele 844 bp
SALK_LBall	Idditicacdiadidddccaicd	Genotyping scis-r	Nutant anele 644-bp
		Construine of 2.1. commencies	PCK product
SALK_LBD1.3	ATTTGCCGATTCGGAAC	Genotyping sci3-1; sequencing	Mutant allele /01-bp
		I-DNA insertion site	PCR product
Cloning			
SCL3-1	GTAGGAATTCATGGTGGCTATGTTTCAAGAAG	Cloning of SCL3 coding sequence	Construction of
SCL3-2	ACTAGGATCCTCACTTCCTGCATCTCCAAGCT		pSCL3-1
SCL3 CDS-5 (BamHI)	CGAGGATCCATGGTGGCTATGTTTCAAGAAG	Cloning of SCL3 coding sequence	Construction of
SCL3 CDS-3 (Sall)	ATAGTCGACTCACTTCCTGCATCTCCAAG		pGEX-SCL3
SCL31-3	CGTCCATGGAATCGAATTACTCAGGTG	Cloning of SCL31 coding sequence	Construction of
SCL31-2	CGAGAATTCCTAAGAAGGGACCCAACAAGAAG		pACT2-SCL31
			(SCL31-AD)
RGA-224	ACGCGGATCCGAATGAAGAGAGATCATCACC	Cloning of RGA	Construction of
BGA-536	GACAGCGGCCGCTCAGTACGCCGCCGTCGAGA		nEG201-BGA
SCI 3-GW-N(C)5		Cloping of SCL3 coding sequence	Construction of
		cloning of Sels coung sequence	
		Classing of CUS (, NUS)	pedzos-sces
GUS-TT		Cioning of GUS (+ NLS)	
GUS-12			pEG203-GUS-NLS
	CCTCCCTGCTGCGG		
SCL3-prom-RI-Swa-F	AGAATTCATTTAAATCCCACACCCAAGCCTCAG	Cloning of 1-kb SCL3 promoter	Construction of pRZ506
SCL3-prom-Xho-R	AGCCTCGAGGGTTCTCTCAATCTTTATC		
3ox1-prom-Swa-F	CATTTAAATAACTGGTATTCAAAGATAG	Cloning of 1-kb GA3ox promoter	Construction of pRZ511
3ox1-prom-Xho-R	CCTCGAGAAGTGTGGTGTTTGGTG		
20ox2-prom-RI-Swa-F	AGAATTCATTTAAATTCAAACTATGTAAGACG	Cloning of 1-kb GA20ox2 promoter	Construction of pRZ507
20ox2-prom-Xho-R	AGCCTCGAGTGAGTGTTGTTGAGGAG		
SCL3-1900prom-H3-F	CTTCTTAAAGCTTCAAATAAGTTGATTCATCCATC	Cloning of 2-kb SCL3 promoter	Construction of pRZ535
SCL3-prom-Xho-R	AGCCTCGAGGGTTCTCTCAATCTTTATC	5	
35S-minimal-BHI-RV	CGGATCCGATATCGCAAGACCCTTCCTCTATA	Cloning of 35S-TATA box and $5'$	Construction of pR7516
LUC-750-R	GTGTAGTAAACATTCCAAAACC	end of LUC	
SCI 3-1900prom-H3-E		Cloning of 2-kh SCI 3 promoter	Construction of nB7536
		(without TATA)	construction of ph2550
SCL3 Neol E		Cloning of SCI2 coding	Construction of pP7E20
		Cioning of SCLS coding	Construction of pR2550
SCL3-Xbal-K	GAGICIAGAGICACIICCIGCAICICCAAG	sequence	
SCL3 GF1	CACCAIGGIGGCIAIGIIICAAGAAG	CIONING OF SCL3 CDNA	Construction of SCL3-OE
			and 35S:SCL3-GFP
SCL3 GR	TCACTTCCTGCATCTCCAAG	Cloning of SCL3 cDNA	Construction of SCL3-OE
			and 35S:SCL3-GFP
SCL3 GWP F1	CACCAAAGGCAAGAGTTCAGGAGG	Cloning of SCL3 genomic DNA	Construction of
			P _{SCL3} :SCL3
SCL3 3' Rev	GAGATCTTCTTTCCTTTTGGGATC	Cloning of SCL3 genomic DNA	Construction of
			P _{SCL3} :SCL3
Quantitative PCR			
Act11 fLC	TACCTCAGCAGAGAGCGT	Act 11 gRT-PCR	184-bp PCR product
Act11 rl C	GAACAGAACCTGGCCC		
GAPC F2	ΔGCTGCTΔCCTΔCGΔTG	GAPC aBT-PCB	219-bp PCR product
GAPC B2		SAIC GITTER	
			220 hp DCB product
A14933380-5DQ			239-bp PCK product
AL4955580-5DQ			
Atlaspit		185 Chip-qpCR	301-bp PCR product
At18SRrt	CIACCICCCGIGICA		
SCL3 fLC	AACAACAATGGGTATAGCC	qRT-PCR analysis of	195-bp PCR product
SCL3 rLC	TGCTGCGTAGGTGTAA	developmental	
		profile of SCL3	
KS F	AACGGAGATTGGACTCAGAA	KS qRT-PCR	237-bp PCR product
KS R	CATGGTTATCAAGTCCCCAAG		
AtKO1 f	TGTCTGCGGAGGAGAAAGT	KO qRT-PCR	149-bp PCR product
AtKO1 r	GATAGCCTCCGATTTGCGTA		
KAO1fLC	CTGACTCCTTCACTCGC	KAO1 gRT-PCR	224-bp PCR product
KAO1rLC	CCTGAGACGCTTGTGTT	· · ·	1 F
KAO2fl C	ΤΓΓΑΤΤΤGGACCCTGAAΔΤC	KAO2 aRT-PCR	234-bp PCR product
KAO2rLC	ΤGTGAGGCAAGAACATCACC		

Table S1. Cont.

PNAS PNAS

GA2001 SDQ GGGCTAAGTTAGGCGT GA200x1 gRT-PCR 377-bp PCR product GA200x3 TCCAACGATAATAGTGGCT GA200x2 gRT-PCR 234 bp PCR product GA200x3-SDQ TCCTAACCGTCACGCT GA200x2 gRT-PCR 236 bp PCR product GA200x3-SDQ TCCTAACCCTCACGCT GA200x2 gRT-PCR 286 bp PCR product GA200x3-SDQ TCCTAACCCTCACGCT GA200x2 gRT-PCR 286 bp PCR product GA20x1FSGT TCGTCGAAGGTTGATGGC GA20x2 gRT-PCR 286 bp PCR product GA20x1FSGT TCGTCGAAGGTTGATGGC GA20x1 gRT-PCR 286 bp PCR product GA20x1FSGT TCGAGAGGAGGGTGATAGTG GA20x2 gRT-PCR 286 bp PCR product GA20x1FSGT TCGAGAGGAGGGTGATAGTG GA20x4 gRT-PCR 21 bp PCR product GA20x4 GRT-PCR 21 bp PCR product GA20x4 gRT-PCR 21 bp PCR product GA20x4 GRT-PCR 21 bp PCR product GA20x4 gRT-PCR 228 bp PCR product GA20x4 GRT-PCR 21 bp PCR product GA20x4 gRT-PCR 228 bp PCR product GA20x5 GRT-PCR 28 bp PCR product GA20x4 gRT-PCR 228 bp PCR product GA20x5 GRT-PCR 28 bp PCR produc	Primer	Sequence	Use	Notes
GA20002 GGTGGGTCACACTC GA2002 CA2002 CA2002 <t< td=""><td>GA200x1-5D0</td><td>GGGCTAAGTTTAGGCGT</td><td>GA20ox1 aRT-PCR</td><td>377-bp PCB product</td></t<>	GA200x1-5D0	GGGCTAAGTTTAGGCGT	GA20ox1 aRT-PCR	377-bp PCB product
CA200x27 TCCAACGATAATAGTGCGT GA200x2 qRT+PCR 234 bp PCR product GA200x37 TGCGACGGTGGAGGATATGGA GA200x3 qRT+PCR 266 bp PCR product GA200x37 TCCTAACCCTCACGCT GA200x3 qRT+PCR 266 bp PCR product GA200x37 GGTGCGAGGATTGATGG GA30x1 qRT+PCR 298 bp PCR product GA20x17 TGGTCGAAGGTTTACG GA30x2 qRT+PCR 298 bp PCR product GA20x1850T TGGAAGGTGGATTGAGG GA20x1 qRT+PCR 101 bp PCR product GA20x1850T TGGAAGGTGGATGGGAT GA20x1 qRT+PCR 21 bp PCR product GA20x31850T TGGAAGGTGGGGATATG GA20x3 qRT+PCR 21 bp PCR product GA20x450Q GGTGGAGTATTGCTGTT GA20x4 qRT+PCR 21 bp PCR product GA20x450Q GGTGGAGGATTAGTGGCTG GA20x4 gRT+PCR 21 bp PCR product GA20x450Q GGTGGAGGTATAGTGGCTGG GA20x4 gRT+PCR 22 bp PCR product GA20x450Q GGTGGAGGTATAGTGGCTGG GTGGGAGGATGGGTGGTGG GTGGGGGATAGGGAGGTGGTGG GTGGTGGAGGAGGTGGTGG GTGGGGGATGGGAGGGTGGGTGG GTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	GA200x1-3DQ	GGTGGCGTCACTACTC		STT Spiren product
GA2003-200 TEGCATGGAGGATAATGA Default Default GA2003-300 TECTAACCTCACCEC GA2003 gHT-PCR 266-bp PCR product GA4R CCATTGCCTTAATGCT GA301 gHT-PCR 401-bp PCR product GA4R GCCAGTGATGGTGAAACCTT GA302 gHT-PCR 286-bp PCR product GA20175 TGGAGCGAAGGTTTACCG GA201 gHT-PCR 101-bp PCR product GA202 JDC TGGAACGTGAGGTGTACGA GA202 gHT-PCR 199-bp PCR product GA202 JDC GGACAAGGCATTGGTGTG GA204 gHT-PCR 211-bp PCR product GA202 JDC GGACAAGGCATTGGTGTG GA204 gHT-PCR 211-bp PCR product GA204 JDC CGGGACGGTGGATTACTGGT GA204 gHT-PCR 212-bp PCR product GA204 JDC CGGACAGGGGATTACTGGT GA204 gHT-PCR 212-bp PCR product GA205 SHD 2 (P IR) GTGACAGCGTTGGTT GA204 gHT-PCR 228-bp PCR product GSGCDSUSUR SHO (P P) GAACAGGCTTGGT transcript 288-bp PCR product GSGCDSUSUR SHO (P R) GGACAGGTGGATTACTGG transcript 288-bp PCR product GSGCCDSUSUR SHO (P R) GGACAGCGGGATTACCGC CHP-PCR SCL2 promot	GA20ox2F	TCCAACGATAATAGTGGCT	GA20ox2 gRT-PCR	234-bp PCR product
GA2003 SPDQ TCCTAACCCTCACCGT GA2003 GRT-PCR 266-bp PCR product GA2004 GRT-PCR CGATCACCTCCCCACACCT GA30x4 GRT-PCR 401-bp PCR product 30x2Prt GGGTCGGAGTGTGTAGGG GA20x1 GRT-PCR 298-bp PCR product 30x2Prt GGGTCGGAGTGTGTAGGG GA20x1 GRT-PCR 101-bp PCR product GA20x1FSGT TCGTGAGTGTGTAGGG GA20x1 GRT-PCR 199-bp PCR product GA20x1FSGT TCGTGAAGTGTGAAGGT GA20x4 GRT-PCR 21-bp PCR product GA20x45SQ GGTCGAGTATTGTGGGTGG GA20x4 GRT-PCR 21-bp PCR product GA20x45DQ GGGTCGAATTGTCGGTGG GA20x6 GRT-PCR 21-bp PCR product GA20x45DQ GGGTCGAATATGGCGTGG GA20x6 GRT-PCR 21-bp PCR product GA20x6-SDQ GCGTTAAGTGGCGTTG Transcript 228-bp PCR product SGL3CDSUBTRSRQ (P1 P) GAACGGGGTTAAGG Detection of andgenous SCL3 349-bp PCR product SGL3CDSUBTRSRQ (P1 P) GAACGGGGTTAGCG ChiP-qCR SCL3 promoter scanning 228-bp PCR product SGL3CDSUBC_F GAACGGGGTTAGCGTT Transcript 168-bp PCR product SGL3DSUBC_F AGCGGAGG	GA20ox2R	TTGGCATGGAGGATAATGA		zo i op i en product
GA2003-300 GAF GAF GAF GAF GAR GAR GAR GAR GAR GAR GAR GAR	GA20ox3-5DO	TCCTAACCCTCACGCT	GA20ox3 gRT-PCR	266-bp PCR product
GARFCCATTCACCTCCCCACACTCTGA3ext qRT-PCR401-bp PCR productJou2PrtGGGTCCCCCAGACGTGTAGGGA3ext qRT-PCR298-bp PCR productJou2PrtGGGTCCCGAGTCGTATGGGA3ext qRT-PCR101-bp PCR productGA2ext1SGTTGGTCGAAGTGGAGTCGTATGGGA2ext1SGT101-bp PCR productGA2ext1SGTGGTCGAGTCGTATGGGA2ext1SGT221-bp PCR productGA2ext3DQGGACAGCGGGGATATGGA2ext3DQGGTCGAGTGTATAGGGA2ext4SDQGGTCGAGTGTATTCCTGGTGA2ext4SDQCGGCGGGATATGGA2ext4SDQCGGCGGGATATGGA2ext3DQCGTCGCGGGGGATATGGA2ext4SDQCGGCGGGATATGGCGTGGTransriptGG2DSSUTR-SRQ (P2 R)GGACAGCGGGGTGGTransriptSCL3DDSSURSRQ (P1 R)GGACCCACCAGGGGCTGGTransriptSCL3DDSSURSRQ (P2 R)GGACCACCACGAGGGCTGGTransriptSCL3DDS RD2 (P1 R)GGACCACCACGAGGGCTGGTransriptSCL3DDS RD2 (P1 R)GGACCACCAGGAGTGGCTGTransriptSCL3DDS RD2 (P1 R)GGACCACCAGGGGGTCGTransriptSCL3DDS RD2 (P1 R)GGACCACCAGGGGGTCGTransriptSCL3DDS RD2 (P1 R)GGACCACCAGGAGTGGCTGPDePCR SCL3 promoter samingSCL3DDS RD3 (GGAGGGGGTCGGGGTCChIP-qCR SCL3 promoter samingSCL3DDS RD4 (GGAGGGGGTCGCAGGGGTCAChIP-qCR SCL3 promoter samingSCL3-DOD-RGGGACTGAGGGGGTCAGGACGTGAGGGGGTCACAGGChIP-qCR SCL3 promoter samingSCL3-DOD-RGGACGAGTGGCACACGGGACGTGAGTGAGGGGGTTACAGGTATAGGCTTACCAGGSCL3-DOD-RGGACGGAGTGGCTTACGG <t< td=""><td>GA20ox3-3DO</td><td>TGTCTGCCCTATAATGCT</td><td></td><td>· · · · · · · · · · · · · · · · · · ·</td></t<>	GA20ox3-3DO	TGTCTGCCCTATAATGCT		· · · · · · · · · · · · · · · · · · ·
GAR GCCAGTGATIGGTGAAACCTT Construction 30x2Hr GGGTGGATCTGTATGG GA3xx2 qTi-XCR 288-bp PCR product 30x2Hr GGGTGGATCTGTATGG GA3xx2 qTi-XCR 288-bp PCR product GA2xx1HSGT TGGGGCGATGTGGCAT GA2xx4 qTi-XCR 199-bp PCR product GA2xx4 SDQ GGTCGAGTGGGCAT GA2xx4 qTi-XCR 212-bp PCR product GA2xx4 SDQ GGTCGAGTGGGTAATG GA2xx4 qTi-XCR 212-bp PCR product GA2xx4 SDQ GGTCGAGTGGGTTAGTG GA2xx4 qTi-XCR 212-bp PCR product GA2xx6 SDQ CGTATGGCTTAGTGGCAT Detection of endogenous SCL3 349-bp PCR product SCL3DDSSBVR-SRQ (P1 P) GAACAGCGATTACCGCA ChPL=qRF SCL3 procenter scanning 228-bp PCR product SCL3DDSSPRSQ (P1 P) GAACACCAGGGTTACCCCA ChPL=qRF SCL3 procenter scanning 228-bp PCR product SCL3Astan1A-R TGAACGACAGTGGCTT ChPL=qRF SCL3 procenter scanning 228-bp PCR product SCL3Astan1A-R GGACGACGGGGTCA ChPL=qRF SCL3 procenter scanning 228-bp PCR product SCL3Astan1A-R GGCAGGAGTGGACTCA ChPL=qRF SCL3 promoter scanning 228-bp PCR product <t< td=""><td>GA4F</td><td>CCATTCACCTCCCACACTCT</td><td>GA3ox1 gRT-PCR</td><td>401-bp PCR product</td></t<>	GA4F	CCATTCACCTCCCACACTCT	GA3ox1 gRT-PCR	401-bp PCR product
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GAZox185CTTCAGGACGAGAGGTTGACGGAGAZox187-FCR101-bp PCR productGAZox185CTTCTTGGAATGTGGGTCGCTGAZox2 qRT-PCR192-bp PCR productGAZox45DOGGCGGGAGTTGGTGTGGTGAZox4 qRT-PCR221-bp PCR productGAZox45DOCGGTGAGTTTTGCTGTTGAZox4 qRT-PCR212-bp PCR productGAZox45DOGGGTGAGTGGGCTAGTGAZox6 qRT-PCR212-bp PCR productGAZOx55DOTGTGCCCACGCTAGTTranscript228-bp PCR productSGL3CDSUTR-SPQ (PZ)ACACAGCGTTATTGCGGTGtranscript228-bp PCR productSGL3CDSUTR-SPQ (PZ)GGACCGCGCATGTCCcndogenous SGL3 transcript168-bp PCR productSGL3CDSUTR-SPQ (PZ)GGACCGCGCATGTCCCcndogenous SGL3 transcript228-bp PCR productSGL3CDSUTR-SPQ (PZ)GGACCGCCATGACGGCnl-PCR SGL3 promoter stanning228-bp PCR productSGL3Acan1A-RTGAGCATGCAGCGGCnl-PCR SGL3 promoter stanning228-bp PCR productSGL3Acan1A-RGTGGCATGGAGGGGTTGtregion 1,420 to 1,139228-bp PCR productSGL3Acan1A-RGGGAGTGAGAGGGTTGcnl-PCR SGL3 promoter stanning228-bp PCR productSGL3Ason1A-RTGGCATGAGAGGGTTGcnl-PCR SGL3 promoter stanning228-bp PCR productSGL3ASON-RTGGGAGTGAGAGGGTTGcnl-PCR SGL3 promoter stanning228-bp PCR productSGL3ASON-RTGGGAGTGAGAGGGTTGcnl-PCR SGL3 promoter stanning228-bp PCR productSGL3ASON-RGGGAGTGAGAGGGTGCAcnl-PCR SGL3 promoter stanning228-bp PCR productSGL3ASON-RGGGGAGTGAGAGGGTACAGcnl-PCR SGL3 promoter stanning18	3ox2Rrt	GGGTCGAGTCTGTATGG		
GA20x185CTTCCTTTCGAATTGTTGAAGCCGA20x23DQGGACAGGCGCTGCGTGA20x42qTPCR199-bp PCR productGA20x43DQGGTCGAGTATTGCTGTGA20x4 qRT-PCR221-bp PCR productGA20x43DQCGGACGTGGATAATGGA20x6 qRT-PCR212-bp PCR productGA20x63DQCGTAAGTGGCTTAATGGCGTGGA20x6 qRT-PCR212-bp PCR productGA20x63DQCTATGCTCACGCTAGTDetection of endogenous SCI3349-bp PCR productSCI3CDSSURFSRQ [P1 F)GAACTGGCTTTACGGCDetection of endogenous SCI3349-bp PCR productSCI3CDSSAQ2 (P1 F)GAACTGGCTTTACGGDetection of transgenic and228-bp PCR productSCI3CDSSAQ2 (P1 F)GAACTGGCATTACGGCIPI-PCR SCI3 promoter sanning168-bp PCR productSCI3-Sasn1A-RGCTTGGTACGACGGCTCACIPI-PCR SCI3 promoter sanning228-bp PCR productSCI3-300-RTGGCATGCACAGGGGTTCACIPI-PCR SCI3 promoter sanning228-bp PCR productSCI3-300-RTGGGCATGCACAGGGGTCACIPI-PCR SCI3 promoter sanning328-bp PCR productSCI3-300-RTGGGCATGCACAGGGCTCACIPI-PCR SCI3 promoter sanning340-bp PCR productSCI3-300-RTGGGCATGCACAGGCACIPI-PCR SCI3 promoter sanning340-bp PCR productSCI3-300-RTGGGCATGCACAGGCIPI-PCR SCI3 promoter sanning340-bp PCR productSCI3-300-RTGGGCATGCACAGGCIPI-PCR SCI3 promoter sanning18-bp PCR productSCI3-300-RTGGGCATGCACAGGCCIPI-PCR SCI3 promoter sanning18-bp PCR productSCI3-300-RTGGGCATGCACAGGCACCACAGGCIPI-PCR SCI3 promoter sanning18-bp PCR product <td>GA2ox1FSGT</td> <td>TGAGGACGAGAGGTTGTACGA</td> <td>GA2ox1 qRT-PCR</td> <td>101-bp PCR product</td>	GA2ox1FSGT	TGAGGACGAGAGGTTGTACGA	GA2ox1 qRT-PCR	101-bp PCR product
GA202-250QTGGAAGTTGGGTCGCTGA2022 qRT-PCR199-bp PCR productGA2024 9DQGGTCGAGTATTTGCTGTTGA20x4 qRT-PCR221-bp PCR productGA20x4 5DQGGTCGAGTGTGATTTGCTGTTGA20x6 qRT-PCR212-bp PCR productGA20x6 5DQCGTTAAGTGGCGTTGCarascript345-bp PCR productSCI3DDSUTR-SRQ P2 F)ACACAGCGTTATTACTGACAADetection of endogenous SCI3345-bp PCR productSCI3CDSSUTR-SRQ P2 F)GACAGGAGGTGGGTCTGCranscript228-bp PCR productSCI3CDS-SRQ 2 (P1 F)GGACGGCGTTAGCCCChP4-pCR SCI3 transcript168-bp PCR productSCI3CDS-SRQ 2 (P1 F)GGACGGAGGTGGGTCGCranscript228-bp PCR productSCI3CDS-SRQ 2 (P1 R)GGTGGTACGACAGGGTGGChP4-pCR SCI3 transcript228-bp PCR productSCI3-1300-FCACACCCAAGCCTCAGChP4-pCR SCI3 transcript228-bp PCR productSCI3-1300-FAGCGGAGTGAGGGTGGChP4-pCR SCI3 promoter scanning228-bp PCR productSCI3-300-FAGGGAGTGACAGGTGGT(region 2)14 to 1,847)228-bp PCR productSCI3-300-FAGGGAGTGACAGGGTGGChP4-pCR SCI3 promoter scanning184-bp PCR productSCI3-300-FAGGGAGTGAGAGGGTTC(region 9) to 455)760SCI3-300-FGGGGAGTGAGAGGGTGCAChP4-pCR SCI3 promoter scanning184-bp PCR productSCI3-300-FGGGGAGTGAGAGGTGCA(region 9) to 455)760SCI3-300-FGGGGAGTGAGAGGGTGCAChP4-pCR SCI3 promoter scanning184-bp PCR productSCI3-300-FGGGAGTGAGAGCGCACACAG(region 9) to 455)770SCI3-300-FGGGG	GA2ox1RSGT	TCCTTTCGAATTGTTGAAGCC		
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GA20x4-5DQ GGTCGAGTATTGCTGTT GA20x4 qRT-PCR 221-bp PCR product GA20x6-5DQ CGGTCGAGTGGATAATG GA20x6 qRT-PCR 212-bp PCR product GA20x6-5DQ CTATGCCTACGCGTGTG GA20x6 qRT-PCR 212-bp PCR product SCL3CDSUTR-SRQ (P2 F) GACGGGGGTGGTGTG transcript 28-bp PCR product SCL3CDSJTR-SRQ (P2 F) GACGGGGGTGGGTCG transcript 28-bp PCR product SCL3CDSJTR-SRQ (P2 F) GACGGGGGTGGGTCG transcript 168-bp PCR product SCL3ScD3TQ-2 (P1 F) GGACGTGGGGTGG Interaction of tansgenic and 228-bp PCR product SCL3scan1A-F TAACGGAGGTGGGTCA ChiP-qPCR SCL3 promoter scanning 228-bp PCR product SCL3-300-F ACACCCAGGTCCAGG ChiP-qPCR SCL3 promoter scanning 228-bp PCR product SCL3-300-F ACGCGATGTGAGGGTGA ChiP-qPCR SCL3 promoter scanning 28-bp PCR product SCL3-300-F AGCGCATGTGAGAGGGTC (region 1,095 to 768) 32-bp PCR product SCL3-S00-F AGCGGATGTGAGAGGGTC (region 90 to +55) 340-bp PCR product SCL3-S00-F GGGGATGGAGGAGGGTC (region 913 to +1,040) 340-bp PCR product SCL3-SRQ GTGGTAGGAGGAGGTC (region 913 to +1,040) 340-bp PCR product SCL3-SRQ GTGGCAGTGGAGAGGGGTC (region 913 to +1,040) 340-bp PC	GA2ox2-3DQ	GACAAGGCATGGCAAT		
GA20x4:5DQ CGGACGGTGGATAATG GA20x5 qRT-PCR 212-bp PCR product GA20x5:0Q CGTTAAGTGGCGTTGA Detection of endogenous SCL3 349 bp PCR product SCL3CDSSTUR-SRQ (P2 R) GAGAGAGGTGGGTTG transcript 228-bp PCR product SCL3CDS-3RO-2 (P1 R) GACACCGCTATACGG ChiP-qPCR SCL3 promoter scanning 168-bp PCR product SCL3SosTA-R GAACCGACCTATGACGG ChiP-qPCR SCL3 promoter scanning 168-bp PCR product SCL3-SaOL-R TAAACGAGAGTGGGTTG (region 2.044 to 1.847) 228-bp PCR product SCL3-300-F CACCCAAGGCTCAG ChiP-qPCR SCL3 promoter scanning 228-bp PCR product SCL3-300-R TGGCATAAGGGGTGA ChiP-qPCR SCL3 promoter scanning 228-bp PCR product SCL3-300-R TGGCATGAGGGTGA ChiP-qPCR SCL3 promoter scanning 228-bp PCR product SCL3-300-R TGGCATGAGAGGTGC (region 3.105 to 7.66) 328-bp PCR product SCL3-300-R GGGACTGAGAGGCTTC (region 910 to 1.50) 328-bp PCR product SCL3-S00-F ACCGGCATTACGG ChiP-qPCR SCL3 promoter scanning 145-bp PCR product SCL3-S00-F GGGCAGGAGGAGGTACAG ChiP-qPCR SCL3 promoter scanning 328-bp PCR product SCL3-S00-F GGCGGCAGTACAGG ChiP-qPCR SCL3 promoter scanning 340 bp PCR product SCL3-SSQ-2 GGACCAC	GA2ox4-5DQ	GGTCGAGTATTTGCTGTT	GA2ox4 qRT-PCR	221-bp PCR product
GA20x6:5DQGCGTTAGGTGGCGTTGGA20x6 gRT-PCR212-bp PCR productSC3205500CTATGCCTCACGCTTACTG28-bp PCR productSC32055780-2 (P1 F)GAACGCGCTTACCGDetection of endogenous SC13 ansoriptSC32055780-2 (P1 F)GAACGCGGTTGGCChiP qPCR SC13 promoter scanningSC3205780-2 (P1 F)GGACCACCTAGACCTendogenous SC13 transcriptSC335xan1A-FTAAACGAGGTTGGCTCCChiP qPCR SC13 promoter scanningSC335xan1A-FGGACCACCTAGGCTChiP qPCR SC13 promoter scanningSC335xan1A-FGGACCACCTAGGCTCAChiP qPCR SC13 promoter scanningSC33500-FAACCGACTGGGTCAChiP qPCR SC13 promoter scanningSC33500-FAACCGACTACGGCTC(region 1.420 to 1.130)SC33500-FAACCGACTACAGGAChiP qPCR SC13 promoter scanningSC33500-FGGGGTGAGAGGGGTC(region 57 to 414)SC33500-FGGGAGTGAGAGGGTC(region 91 to 455)SC3205780-2GGAACTGCCGTTTACGGChiP qPCR SC13 promoter scanningSC3205780-2GGAACTGGCGTTTACGGChiP qPCR SC13 promoter scanningSC3205780-2GGGACACCATGACCT(region +1.307 to +1.400)SC3205780-2GGGACACCATGACCT(region +1.307 to +1.400)SC3205780-2GGGACACCATGACCTScanning region 3.179 to 2.982Solt-scanBA-RGTGTGGACGTGTGTCAScanning region 3.179 to 2.982Solt-scanBA-RGTGTGGACTGTGTCAScanning region 3.179 to 2.982Solt-scanBA-RGTGTGGACACCAGCACChiP qPCR GA30x1 promoterSolt-scanBA-RGTGTGGCACTACCGAGAChiP qPCR GA30x1 promoterSolt-scan	GA2ox4-3DQ	CGGACGGTGGATAATG		
GA20x6-3DQCTATGCCTCACCCTACTSCI3CDSSUTR-SRQ (P2 F)CGAGGAGAGTCGGTTASCI3CDSSUTR-SRQ (P2 F)GGAGGAGAGTCGGTTGSCI3CDS-SRQ-2 (P1 F)GTGACCACCATGACCTCGAGGAGAGTGCCTCCChiP-qCR SCI3 promoter scanningSCI3CDS-SRQ-2 (P1 F)GTGACCACCATGACCTCGAGGAGTGCCTTACGGChiP-qCR SCI3 promoter scanningSCI3-scan1A-RGCTTGGTACGAAGACCGCGTTGGTACGAAGACCG(region 2,014 to 1,847)SCI3-300-FCACACCCAGGGGATTCGAGGAGCGGGATT(region 2,014 to 1,847)SCI3-300-FCACACCCAAGGGGATCCGAGGAGGAGGGGGGGAT(region 597 to 414)SCI3-300-FGGAGTGAGAGGGGTCCG13-Scon4-FCGTGGGGAGGGGGGGGCG13-Scon4-FCGTGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	GA2ox6-5DQ	GCGTTAAGTGGCGTTG	GA2ox6 qRT-PCR	212-bp PCR product
SCJ32DSJUR-SRQ (P2 F) ACACACGCGATTACTCACACA Detection of endgenous SCJ3 39-bp PCR product SCJ32DSJRA-SRQ (P2 R) GCAGGAGAGTCGGTTG transcript 228-bp PCR product SCJ32DSJRD-2 (P1 F) GAACTGCGGTTACGG Detection of tansgenic and 228-bp PCR product SCJ32DSJRD-2 (P1 R) GGACCACCAGGCTCC ChIP-qPCR SCJ3 promoter scanning 168-bp PCR product SCJ3-scan1A-F TGACACCACAGCTCAG ChIP-qPCR SCJ3 promoter scanning 228-bp PCR product SCJ3-stan1A-F TGGCATGAGGTGGATT (region 1,420 to 1,139) 328-bp PCR product SCJ3-stool-F AACCGACTACAGGCT (region 1,420 to 1,139) 328-bp PCR product SCJ3-stool-F AACCGACTACAGGCT (region 97 to 414) 164-bp PCR product SCJ3-Stool-F AACCGACTATACGCA ChIP-qPCR SCJ3 promoter scanning 145-bp PCR product SCJ3-Stool-F AACCGACTATACGGA (region 97 to 414) 30-bp PCR product SCJ3-Stool-F GGGACTCACAGGGTTACGG ChIP-qPCR SCJ3 promoter scanning 145-bp PCR product SCJ3-Stool-F GGGACTCACAGGACTACAG (region 91 to +55) 228-bp PCR product SCJ3-Stool-F GGACCACCAGACT (region 91 to +55) 228-bp PCR product SCJ3-Stool-F GACCGCGGTTTACGG ChIP-qPCR SCJ3 promoter scanning 248-bp PCR product SCJ3-Stool-F	GA2ox6-3DQ	CTATGCCTCACGCTAGT		
SCL3DDS-SRQ-2 (PT R) CGAGGAGAGTGCTCTACGG Detection of tansgenic and 228-bp PCR product SCL3DDS-SRQ-2 (PT R) GTGACCCACCATGACCT endogenous SCL3 transcript SCL3-scanLA-F TAAACGAGACAGTGCCTCC ChP-qPCR SCL3 promoter scanning 168-bp PCR product SCL3-scanLA-F CACACCCAACACCG (region 2,014 to 1,139) 228-bp PCR product SCL3-sign0-F CACACCCAAGTGCTCA ChP-qPCR SCL3 promoter scanning 228-bp PCR product SCL3-sign0-F CACACCCAAGGGTTCA ChP-qPCR SCL3 promoter scanning 228-bp PCR product SCL3-sign0-F CACACCCAAGGGTTCA ChP-qPCR SCL3 promoter scanning 184-bp PCR product SCL3-sign0-F CACACCCAAGGGTTCA (region 910 to +55) 152-bp PCR product SCL3-sign2-2 GTGAGTGAGAGGTTCACAGG (region +133 to +1,040) 228-bp PCR product SCL3-Sign2-2 GTGACCACCACGAGG ChP-qPCR GAL3 promoter scanning 246-bp PCR product SCL3-Sign2 GTGACCACCACGAGGG ChP-qPCR GAL3 promoter scanning 246-bp PCR product SCL3-Sign2 GTGACCACCACGAGGG ChP-qPCR SCL3 promoter scanning 246-bp PCR product SCL3-sign2 GTGACCACCACGAGGG ChP-qPCR GAL3 promoter scanning 246-bp PCR product <t< td=""><td>SCL3CDS5UTR-5RQ (P2 F)</td><td>ACACACGCTATTACTCACAA</td><td>Detection of endogenous SCL3</td><td>349-bp PCR product</td></t<>	SCL3CDS5UTR-5RQ (P2 F)	ACACACGCTATTACTCACAA	Detection of endogenous SCL3	349-bp PCR product
SCL3DS-SRQ-2 (P1 F) GAACTIGGCCTTAGCCT endogenous SCL3 transcript 228-bp PCR product SCL3DS-SRQ-2 (P1 R) GTGACCACCATCATCCC ChP-qPCR SCL3 promoter scanning 168-bp PCR product SCL3-scanLA-R GCTGGATCACCACTCAG ChP-qPCR SCL3 promoter scanning 228-bp PCR product SCL3-sign1-A GGGATGACGAGGTGGATT (region 1,420 to 1,139) 228-bp PCR product SCL3-s00-F AACGGACTATCACGG ChP-qPCR SCL3 promoter scanning 228-bp PCR product SCL3-s00-F AACGGACTATCACGGC ChP-qPCR SCL3 promoter scanning 184-bp PCR product SCL3-s00-F GGGAGTGAGAGGGTTC (region 90 to +55) 145-bp PCR product SCL3-son3-F TGGTAGCACACAGG (region 910 to +55) 228-bp PCR product SCL3-scan3-R GTGGTAGCACACAGG ChP-qPCR SCL3 promoter scanning 30-bp PCR product SCL3-SRQ-2 GTAACCACCATGACC (region 910 to +55) 228-bp PCR product SCL3-SRQ GTGACCACCACAGAGC (region 910 to +1307 to +164) 30-bp PCR product SCL3-SRQ GTGACCACCACAGAGC (region 3,179 to +9,82) 30-bp PCR product SCL3-SRQ GTGACCACCACAGAGC (region 1,307 to +1,842) 30-bp PCR product 30-bp PCR product <t< td=""><td>SCL3CDS5UTR-3RQ (P2 R)</td><td>CGAGGAGAGTCGGTCTG</td><td>transcript</td><td></td></t<>	SCL3CDS5UTR-3RQ (P2 R)	CGAGGAGAGTCGGTCTG	transcript	
SCL3:SDS-3RQ-2 (P1 N) GIGALCALCA IGACCI endogenous SCL3 transcript SCL3:scan1A-F TAAACGAGAAGAGTGCCTCC ChP-qPCR SCL3 promoter scanning 168-bp PCR product SCL3:3100-F CACACCCAAGGCTCAG ChP-qPCR SCL3 promoter scanning 228-bp PCR product SCL3:300-F CACACCCAAGGGTITCA ChP-qPCR SCL3 promoter scanning 228-bp PCR product SCL3:300-F CACACCCAAGGGGTITCA ChP-qPCR SCL3 promoter scanning 184-bp PCR product SCL3:500-F AACGGAGTAGAGGGTTC (region 90 to +55) 184-bp PCR product SCL3:Scan3A-R GTGGTGATGAAGCTACAG ChP-qPCR SCL3 promoter scanning 145-bp PCR product SCL3:SCDS-3RQ-2 GTAACTGAGGTTTCACGG ChP-qPCR SCL3 promoter scanning 228-bp PCR product SCL3:SCDS-3RQ-2 GTAACTGACGTTTCACGG ChP-qPCR SCL3 promoter scanning 228-bp PCR product SCL3:SCDS-3RQ-2 GTAACTGACCACACACAGAG (region +813 to +1,040) 228-bp PCR product SCL3:SCDS-3RQ-2 GTAACTGCTTTCGTGT (region +1,37 to -1,946) 340-bp PCR product SCL3:SARQ GTGTGACTGTTGCAGG ChP-qPCR GA3ax1 promoter 198-bp PCR product SCL3:SARQ GTGTGACTGTGTGCAG ChP-qPCR GA3ax1 promoter 198-bp PCR product <t< td=""><td>SCL3CDS-5RQ-2 (P1 F)</td><td>GAACIGCGCIIIACGG</td><td>Detection of tansgenic and</td><td>228-bp PCR product</td></t<>	SCL3CDS-5RQ-2 (P1 F)	GAACIGCGCIIIACGG	Detection of tansgenic and	228-bp PCR product
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Scl3-1300-RCACACCCAGChiPaper Scl3-1300-RCacAcCCAGGTGATT(region 1,420 to 1,139)Scl3-1300-RTGACATAGGGTCAAChIPaper Scl3 promoter scanning328-bp PCR productScl3-900-FAACCGACTATCACGCAChIPaper Scl3 promoter scanning328-bp PCR productScl3-500-RGGAGTGAGGAGGTCT(region 1,95 to 768)184-bp PCR productScl3-scan3A-FTCGATTGCAGGGTCTTCAAAGChIP-qPCR ScL3 promoter scanning145-bp PCR productScl3-scan3A-RGTGGTGATGAAGCTACAG(region 90 to 414)228-bp PCR productScl3-scan3A-RGTGGCATGAAGCTACAG(region 91 as to +1,040)228-bp PCR productScl3-scan3A-RGTGGACCACCATGAGC(region 91 as to +1,040)340-bp PCR productScl3-scan3A-RGTGTGACGACTTTACGGChIP-qPCR Scl3 promoter scanning340-bp PCR productScl3-scan8A-RTGTGGACTGTGTGCAG(region 1,307 to +1,646)30x1-scan8A-RGTGTGACTGTGTGCATscanning (region 3,179 to 2,982)3ox1-scan8A-RGTGTGACGGTGATTACCAChIP-qPCR GA3ox1 promoter182-bp PCR product3ox1-scan10A-FCCCTTTGTAAGATCCCAGGChIP-qPCR GA3ox1 promoter152-bp PCR product3ox1-scan10A-FTGGCTAGAGGGTATTACCAChIP-qPCR GA3ox1 promoter152-bp PCR product3ox1-scan11A-FAGACTAGCGACCACATChIP-qPCR GA3ox1 promoter152-bp PCR product3ox1-scan12A-RTGGTAGAGACGACTATCCAChIP-qPCR GA3ox1 promoter152-bp PCR product3ox1-scan12A-RTGGTGGCAAAGCGACTTACChIP-qPCR GA3ox1 promoter172-bp PCR product3ox1-scan12A-RTGGTAGAGACCACAATChIP-q	SCL3-scanTA-R	GUIIGGIACGAAGACCG	(region 2,014 to 1,847)	
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Scl3-500-RGGGAGTGAGAGAGGTTCClift qcGS promoter scanning16F bp PCR productSCl3-500-RGGGAGTGAGAGAGGTTC(region 597 to 414)SCl3-scn3A-RGTGGTGAGAGACACAG(region 90 to +55)SCl3CDS-5RQ-2GAACTGCGGTTTACGGChIP-qPCR SCl3 promoter scanning228-bp PCR productSCl3-SRQATTATGCGAGTGTGCAGG(region +13 to +1,040)SCl3-SRQATTATGCGAGTGTGCAGGChIP-qPCR SCl3 promoter scanning340-bp PCR productSCl3-SRQATTACACCCACACGAGAG(region +1,307 to +1,646)30x1-scan8A-RGTGTGACTGTGTGTCATSox1-scan8A-RGTGTGACTGTGTGTCATscanning (region 3,179 to 2,982)30x1-scan10A-FCCCTTTGTTAAGATGCCAGChIP-qPCR GA30x1 promoter281-bp PCR product30x1-scan10A-RTGATAATCACTCCCCGAATCTAscanning (region 1,978 to 1,842)30x1-scan11A-FACATATCACGGTCATTACCAChIP-qPCR GA30x1 promoter152-bp PCR product30x1-scan11A-RTGCTGCAAAGTAGAGGscanning (region 1,978 to 1,842)30x1-scan12A-RTTGGTTGAGCGATGTGTC30x1-scan12A-RTGGTTGAGGAGTTTACCGAChIP-qPCR GA30x1 promoter152-bp PCR product30x1-scan12A-RGGTCCCTTCCAAAGTChIP-qPCR GA30x1 promoter172-bp PCR product30x1-scan12A-RGGTCCCTTCCAAAGTTGCscanning (region 1,326 to 1,187)GA30x1-900-FGTTCCCTTCCAAAGTTGCscanning (region 1,21 to 835)30x1-scan14A-RGTCCCCCCCTTChIP-qPCR GA30x1 promoter172-bp PCR product30x1-scan14A-RGTCCCCCACTTGCCTscanning (region 1,128 to 1,201)GA30x1-900-FGTTCCCTTCCAAAGTTGCscanning (region 1	SCI 3-500-F	ΔΑΓΓΕΛΟΤΑΤΟΔΟΓΟ	ChIP-aPCR SCI 3 promoter scapping	184-bp PCR product
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GA200x1-scan-R4TGGACCACTAGAGGTTGScanning (region 3,187 to 3,000)GA200x1-scan-R4TGGACCACTAGAGGTTGscanning (region 3,187 to 3,000)GA200x1-scan-R5GACATGCTTTCAGCGTChIP-qPCR GA200x1 promoter291-bp PCR productGA200x1-scan-R5ACCCAACAATGCTGGAscanning (region 2,660 to 2,370)366-bp PCR productGA200x1-scan-R7GAGCCGGAATCAACCTChIP-qPCR GA200x1 promoter186-bp PCR productGA200x1-scan-R7AGACATGAGCATGGTCGscanning (region 2,076 to 1,891)366-bp PCR productGA200x1-scan-R9GGCTGGGTAGCAAGACTChIP-qPCR GA200x1 promoter291-bp PCR productGA200x1-scan-R9GGCTGGGTGATTGAGAAscanning (region 1,246 to 956)3620ox1-scan-R9GA200x1-300-FTGCCACACAACAAACATChIP-qPCR GA200x1 promoter220-bp PCR productGA200x1-300-RTTCGCTAAAACAAGTGGTscanning (region 469 to 250)367000000000000000000000000000000000000	GA20ox1-scap_E4	ATCTICATCGTACACTTGTT	$\frac{1}{2} \frac{1}{2} \frac{1}$	188 bp PCP product
GA200x1-scan-R5GACATGCTTTCAGCGTChIP-qPCR GA20ox1 promoter291-bp PCR productGA200x1-scan-R5ACCCAACAATGCTGGAscanning (region 2,660 to 2,370)366-bp PCR productGA200x1-scan-R7GAGCCGGAATCAACCTChIP-qPCR GA20ox1 promoter186-bp PCR productGA200x1-scan-R7AGACATGAGCATGGTCGscanning (region 2,076 to 1,891)366-bp PCR productGA200x1-scan-R9GGCTGGGTAGCAAGACTChIP-qPCR GA20ox1 promoter291-bp PCR productGA200x1-scan-R9GGCTGGGTGATTGAGAAscanning (region 1,246 to 956)366-bp PCR productGA200x1-300-FTGCCACACAACAAACATChIP-qPCR GA200x1 promoter220-bp PCR productGA200x1-300-RTTCGCTAAAACAAGTGGTscanning (region 469 to 250)367-bp PCR productGA200x1-scan-F13GTGGTCAATCACGGCAChIP-qPCR GA200x1 promoter247-bp PCR productGA200x1-scan-R13CCAACGCATCGCAGAAAscanning (region +283 to +529)367-bp PCR product	GA200x1-scan-R4	TGGACCACTAGAGGTTG	scapping (region 3 187 to 3 000)	100-bp FCK product
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GA200x1-scan-F7GAGCCGGAATCAACCTChIP-qPCR GA200x1 promoter186-bp PCR productGA200x1-scan-R7AGACATGAGCATGGTCGscanning (region 2,076 to 1,891)GA200x1-scan-F9AAGCGGTAGCAAGACTChIP-qPCR GA200x1 promoter291-bp PCR productGA200x1-scan-R9GGCTGGGTGATTGAGAAscanning (region 1,246 to 956)200-bp PCR productGA200x1-300-FTGCCACACAACAAACATChIP-qPCR GA200x1 promoter220-bp PCR productGA200x1-300-RTTCGCTAAAACAAGTGGTscanning (region 469 to 250)247-bp PCR productGA200x1-scan-F13GTGGTCAATCACGGCAChIP-qPCR GA200x1 promoter247-bp PCR productGA200x1-scan-R13CCAACGCATCGCAGAAscanning (region +283 to +529)247-bp PCR product	GA200x1-scan-R5	ACCCAACAATGCTGGA	scanning (region 2,660 to 2,370)	251 bp i ch product
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GA20ox1-scan-R9GGCTGGGTGATTGAGAAscanning (region 1,246 to 956)GA20ox1-300-FTGCCACACAACAACAACATChIP-qPCR GA20ox1 promoter220-bp PCR productGA20ox1-300-RTTCGCTAAAACAAGTGGTscanning (region 469 to 250)247-bp PCR productGA20ox1-scan-F13GTGGTCAATCACGGCAChIP-qPCR GA20ox1 promoter247-bp PCR productGA20ox1-scan-R13CCAACGCATCGCAGAAscanning (region +283 to +529)30-bp PCR product	GA20ox1-scan-F9	AAGCGGTAGCAAGACT	ChIP-gPCR GA20ox1 promoter	291-bp PCR product
GA20ox1-300-FTGCCACACAACAACATChIP-qPCR GA20ox1 promoter220-bp PCR productGA20ox1-300-RTTCGCTAAAACAAGTGGTscanning (region 469 to 250)GA20ox1-scan-F13GTGGTCAATCACGGCAChIP-qPCR GA20ox1 promoter247-bp PCR productGA20ox1-scan-R13CCAACGCATCGCAGAAscanning (region +283 to +529)	GA20ox1-scan-R9	GGCTGGGTGATTGAGAA	scanning (region 1,246 to 956)	
GA20ox1-300-RTTCGCTAAAACAAGTGGTscanning (region 469 to 250)GA20ox1-scan-F13GTGGTCAATCACGGCAChIP-qPCR GA20ox1 promoter247-bp PCR productGA20ox1-scan-R13CCAACGCATCGCAGAAscanning (region +283 to +529)	GA20ox1-300-F	TGCCACACAACAACAT	ChIP-qPCR GA20ox1 promoter	220-bp PCR product
GA20ox1-scan-F13GTGGTCAATCACGGCAChIP-qPCR GA20ox1 promoter247-bp PCR productGA20ox1-scan-R13CCAACGCATCGCAGAAscanning (region +283 to +529)	GA20ox1-300-R	TTCGCTAAAACAAGTGGT	scanning (region 469 to 250)	
GA20ox1-scan-R13 CCAACGCATCGCAGAA scanning (region +283 to +529)	GA20ox1-scan-F13	GTGGTCAATCACGGCA	ChIP-qPCR GA20ox1 promoter	247-bp PCR product
	GA20ox1-scan-R13	CCAACGCATCGCAGAA	scanning (region +283 to +529)	

Table S1. Cont.

PNAS PNAS

Primer	Sequence	Use	Notes
GA20ox2-scan11-F	AACAGTTAGGTTCCTAGTCT	ChIP-qPCR GA20ox2 promoter	233-bp PCR product
GA20ox2-scan11-R	GGTTTCAGTCATGCCTT	scanning (region 2,828 to 2,596)	
GA20ox2-scan9-F	GCACTCTCTAAGCAGCG	ChIP-qPCR GA20ox2 promoter	259-bp PCR product
GA20ox2-scan9-R	AGGTAGGGCCAATAGC	scanning (region 2,092 to 1,834)	
GA20ox2-scan7-F	ATCATTCGTGGGTGCC	ChIP-qPCR GA20ox2 promoter	286-bp PCR product
GA20ox2-scan7-R	GGTTGGTTCGACCAGT	scanning (region 1,501 to 1,216)	
GA20ox2-scan5-F	GTCGAACCAACCATGAAT	ChIP-qPCR GA20ox2 promoter	335-bp PCR product
GA20ox2-scan5-R	AGGAGGAAGAGGTTCCC	scanning (region 1,227 to 893)	
GA20ox2-scan3-F	GACCGAAGCCAAAATTGA	ChIP-qPCR GA20ox2 promoter	381-bp PCR product
GA20ox2-scan3-R	CATTCTTATCGGAATCTTGC	scanning (region 761 to 381)	
GA20ox2-scan1-F	ATGAAATCCCATGTGGC	ChIP-qPCR GA20ox2 promoter	184-bp PCR product
GA20ox2-scan1-R	TCTTGAGAGTTTTGGGGT	scanning (region 201 to 18)	
GA20ox2-coding1-F	GCAGTTTGGGTACGTG	ChIP-qPCR GA20ox2 promoter	243-bp PCR product
GA20ox2-coding1-R	GTCTCGGTTTACGCCT	scanning (region +537 to +779)	
GA20ox3-scan-F1	CACGACATTGTTGTGTTATGC	ChIP-qPCR GA20ox3 promoter	280-bp PCR product
GA20ox3-scan-R1	GGTCATCACGGTAGAGTT	scanning (region 3,486 to 3,207)	
GA20ox3-scan-F3	CGCTCGTCAGTAAAGCA	ChIP-qPCR GA20ox3 promoter	209-bp PCR product
GA20ox3-scan-R3	TTGACAGATAGATAGCCTCAC	scanning (region 2,748 to 2,540)	
GA20ox3-scan-F6	GAATGAACTTGCTCTCTGAT	ChIP-qPCR GA20ox3 promoter	191-bp PCR product
GA20ox3-scan-R6	GTGATAGGTGGTGCTCT	scanning (region 2,139 to 1,949)	
GA20ox3-scan-F7	TGTTGTGTTCTTCCACTTT	ChIP-qPCR GA20ox3 promoter	202-bp PCR product
GA20ox3-scan-R7	GTGAGGCCCATCGTAG	scanning (region 1,390 to 1,189)	
GA20ox3-1000-F	ACGGACGGATTTAGAGG	ChIP-qPCR GA20ox3 promoter	137-bp PCR product
GA20ox3-1000-R	GCTACAACCCCCGTTA	scanning (region 1,049 to 913)	
GA20ox3-500-F	TATTCCGTTTGGATGGGT	ChIP-qPCR GA20ox3 promoter	222-bp PCR product
GA20ox3-500-R	AAATTGCCAGTCGAGTAT	scanning (region 652 to 431)	
GA20ox3-scan-F9	GTCGATACAGCCAGTTCA	ChIP-qPCR GA20ox3 promoter	202-bp PCR product
GA20ox3-scan-R9	GGTCGGTAAGTGGGAGA	scanning (region 295 to 94)	
GA20ox3-scan-F11	ATGGGCGATGGATACG	ChIP-qPCR GA20ox3 promoter	262-bp PCR product
GA20ox3-scan-R11	ACTGCGGGTAGTAATTCA	scanning (region +522 to +783)	