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      *           20           *           40           *           60           *           80
Cs6g17570: M----ADSLGVKRGAWTGEEDDLLRKCIKYGEAKWHQVPLRAGLHRCRKSCRLRWLNLYLNPNIKRGEFADEVDLILRL :76
AtMYB113 : M---GESPKGLRKGTWTTEEDILLRQCIDKYGEGKWHRVPLRTGLNRCRKSCRLRWLNLYLKPSIKRGKLCSDVDLVLRL :77
SlMYB75 : MNTPMCASIGVRKGSWTEQEDSLLRDCIKYGEKWHLVPLRAGLNRCRKSCRLRWLNLYLRPHIKRGDFAPDEVDLILRL :80
      M      SLGVRKG WT EED LLR CI KYGEGKWH VPLRAGLNRCRK SCRLRW LNYL P IKRG FA DEVD LILRL

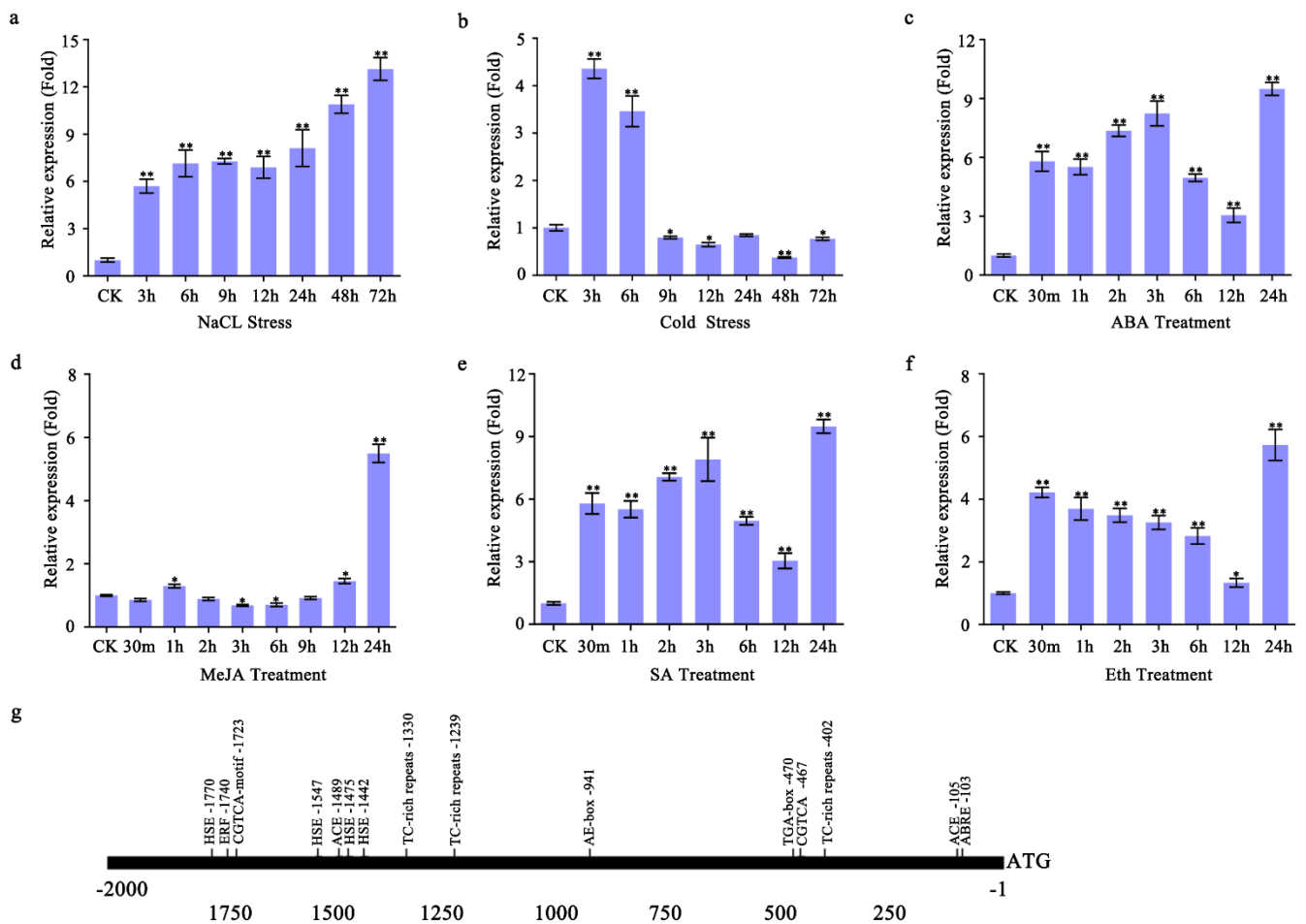
      *           100          *           120           *           140           *           160
Cs6g17570: HKLLGNRWSLIVGRLPGRRTANDVKNFWNTHLRKKVDKCKNNK-----EMKAKAEKVEKINI IKPOPRTFA--- :142
AtMYB113 : HKLLGNRWSLIAGRLPGRTANDVKNYWNTHLSKKHDERCKTKMINKN-----ITS-PTSSAQKIDVLKPRPRSFS DKN :151
SlMYB75 : HKLLGNRWSLIAGRLPGRTANDVKNYWNTHFHKKLSIIAPHLPHSRPRSHPRLOIKHKSI AVTKNEIIRPQPRNFSNVK :160
      HKLLGNRWS LIA GRLPGRTA NDVKNY WNTHL KK D C K KHK V KI IKK POPR FS

      *           180           *           200           *           220           *           240
Cs6g17570: -KN-SQWLKGGMTSNNLQLGDYNI GKQSTPSDHHHHHQQQEN---ETESVWVESFLFG-DELDQGLSSSLSRPEEES :216
AtMYB113 : SCNDVNILPKVDVPLHLGLNNNYVCSSTTCNKDEQDKKLINTLLDGDNMWVESTLFA-DVLGPEATEETAKG----- :224
SlMYB75 : -KNDSHWCNNKSMITNTLDKDDKRCNEIVVNICEKPIGENTSSI---DDGVEWWTNLENCIEIEEETANTNFG----KT :232
      KNDS WL K M N L L D E S I D WWESLLE DEL E T G

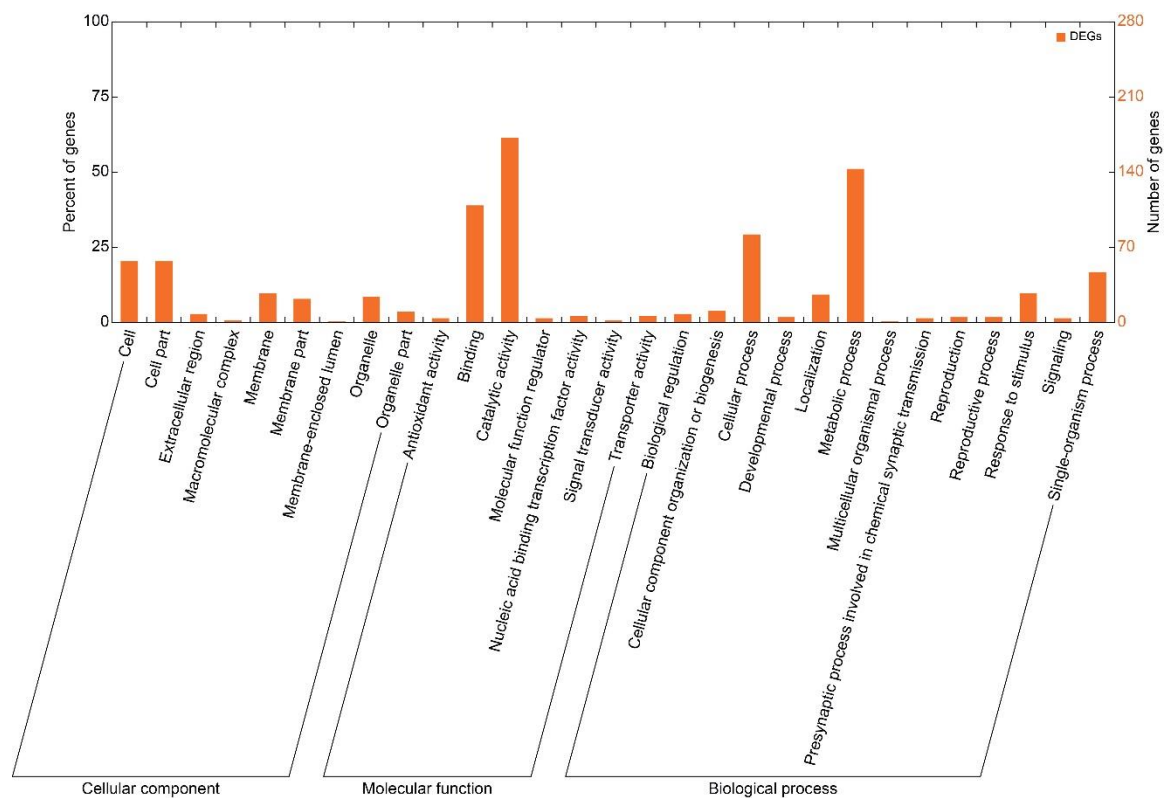
      *           260           *           280
Cs6g17570: TTANIFAEKSPVVTQVTENRVIEAGQSCPTDDFAFDAELWDLNNAK :262
AtMYB113 : --VTLPDFEQWAR-----EDEETLELN-- :246
SlMYB75 : PTMLLHEEISPLVNGEDN-SMQQGPINNWDDFSTDIDLWNLLN-- :275
      T L E SP N G DDF FD ELW LLN

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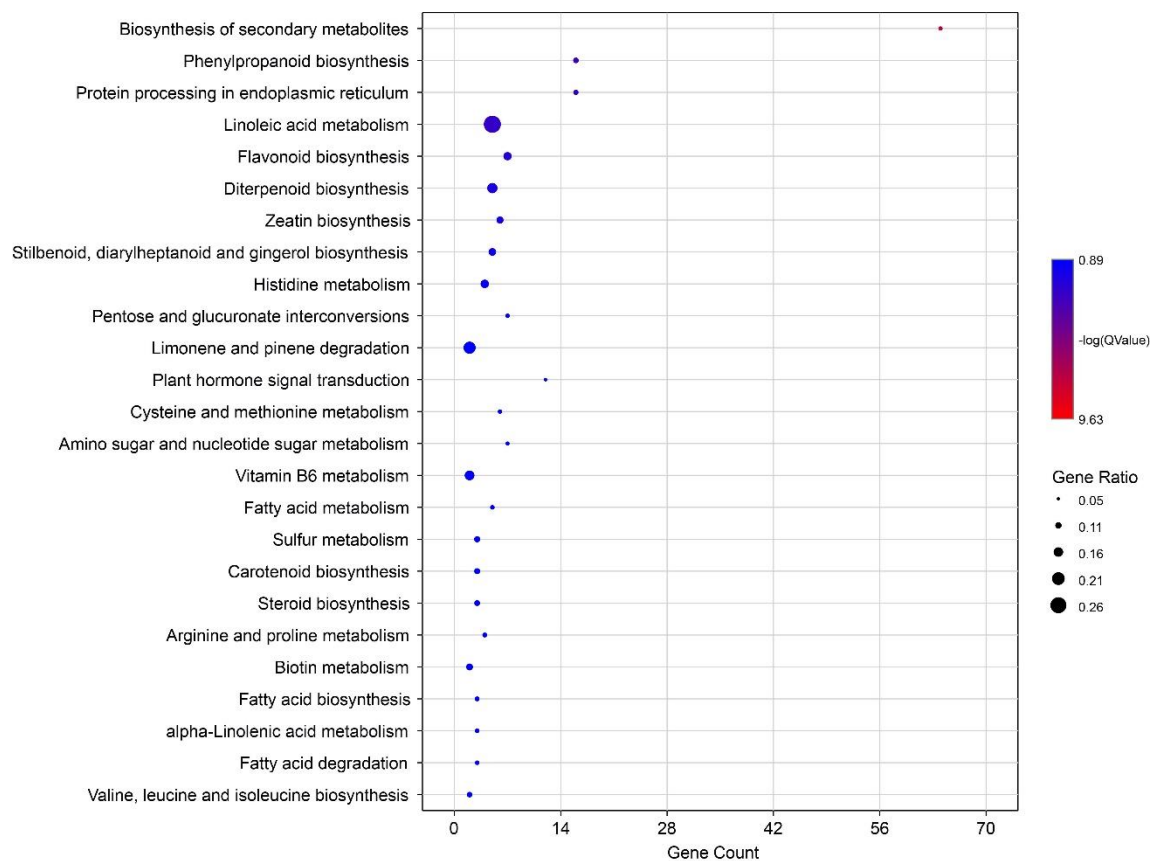
**Supplementary Fig S1.** Alignment of amino acids specific to Cs6g17570, AtMYB113 and SlMYB75. The amino acids were aligned using CLUSTAL X and analyzed with MEGA version 6 software. Completely conserved and highly conserved residues are colored black and grey, respectively. Dashes are gaps introduced to maximize alignment. The alignment was produced from three amino acid sequences from *Citrus sinensis* (Cs6g17570, KT757348), *Arabidopsis thaliana* (AtMYB113, NM\_105308), *Solanum lycopersicum* (SlMYB75, solyc10g086250).



**Supplementary Fig S2.** *SIMYB75* was involved in various hormones or stresses response. **a-f.** Leaves of one-month-old tomato plants treated with NaCL, Cold, ABA, MeJA, SA and Eth were harvested to analyse the gene expression level. Data represent means  $\pm$  SD of three biological replicates and analysed by student's t test. \*,  $P < 0.05$ ; and \*\*,  $P < 0.01$  (Student's t test). **g,** Promoter region of *SIMYB75* and its putative cis-elements.



**Supplementary Fig S3.** Gene ontology (GO) enrichment analysis of the DEGs with predicted function. The go terms enriched by DEGs based on biological process, cellular component and molecular function, respectively.



**Supplementary Fig S4.** KEGG enrichment scatter plot of DEGs. The y-axis represents the name of pathway, and the x-axis represents the gene count. The color represents the  $-\log(q\text{-value})$  and the dot size represents the gene ratio.

**Supplementary Table S1 Information of eight MYB-binding conserved *cis*-elements used in yeast one-hybrid experiments.**

<b>Conserved Element</b>	<b>Sequence</b>	<b>Representative sequence</b>
MYBST1	GGATA	TGGATAA
MYBCORE	CNGTTR	TCAGTTAT
MYBPLANT	MACCWAMC	AAACCAACCC
MYBPZM	CCWACC	ACCTACCC
AMYBOX1	TAACARA	ATAACAAAT
MYB2CONSENSUSAT	YAACKG	TTAACTGA
AMYBOX2	TATCCAT	ATATCCATG
MYB1LEPR	GTTAGTT	AGTTAGTTG

a

TGAAGAGTTAATATTTAGTGAAAATTGTGGGCCAGCTTGAATGAAAACCTTGATATTTGTTTGATAAAAAACACGTATTAATGCTGATTTAT  
TTTTAAATATTTGATTAAGTGAATATTTTATATATAATTTATTAATAAACAATAAATATAACGTGGGTAAAATTATCAAATCTAAA  
TTAATTTATATTTATTTAAATAGATTAAAGAATGACTATAAGAAAGTAGAAAATACGAAGATAGACATAATATCATAAACCAAGGAAAATGA  
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TTAGCTTTAACACATTAAGAAAATTATTTATATCCCAAGTGAAAAATATTCTAGGACGCAATTTATTGTCTCCTTAAGGCAAAATATTT  
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ATATTATAAATTGTGAAACTCAGTAATAAAACGAGCGATTAAATTTGATATAAGTTCAGAACTCATAAATTTAAATTCGATTGAGCGTTTCG  
ATAATATCTTGAAAAAATTTCTACATGCCCAAAACAATTCACACACATAGGTACCTAAGCAAACTTCATCATCTATATAAAGAGAAGCTCTTA  
AGAGACCAAAATGCAACCAAAACCATATATCAATTAAGTTTGAAATAATAAAA

b

TAATAGTTATTGATTTTATTAATGAGTTGAAGTCTTCGCATTACTTTATGTTGATATTATTTGAAATGTTAAGTTTAGATTGGTTGGTTCGC  
TCACATAGGAGGGTAAGTGTGGGTGCCAGTCGCGGCTCGGATTGGGTGCTGACACAAAAAGAGGATTTTACCTCACATAAAATAAAG  
ATCGATAAAGTCTGACTATGCATATACGTCACATTTACCAGACCTAATTATGAAATTTTATTATTAATGTTTACGACCTCTATGTTTAGAAA  
GCACTTGTCGATGAATCTTTGAATTTGGTTTAGAACAACCTTGACAAATAATGGTACACTAATAACGTATCAAATTCATATAATTTATAGTTT  
CTCAAAATTGATAAACTATTATAACAACACAAAAATGAATCACTTAACATTGTCGAGTTCTCTTGAGTCAAGGGTTATCATAAAGAACT  
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AACCACAATCTTTTCTACCTATATATAATCCAAGAATATTATACATAAATTATATCCAACTTGATTTCCATTCTAAACCTAACCAAAAAATA  
AAAAATTTAGCTCCAAGA

c

TAATATTTTCAAGAAAAAATTTAAGATTGACGGGAATAAGCGAAATCTCTGACTTTTACCCGTCAAACCTCTTTGAAAGTAATTCACAC  
GTGCTTTCTCGTAATCTGAAGCAATCTCCAAAAATAGATCAAACCTAAAAACACAATTGAGTTATAAATAAAAAATCAACTAAAGAACATG  
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TATAAGAATAAATCACCTCTTAACCAACTACGGAACATAGTACTCTTAATACTTTACTCATACAAAATTTAATACCTGCATAATAAATACCT  
CCAAATCAATTATCAAATACTTCACTCATACAAAATCTAACACCTACATAATAAATCTACGTCCAAACCAATTACCAAAACGTGATAGTACTCTTA  
GTATAACAACCAAGAGATAATGAAGTAGAGAGACCTTTTGGAGGTGTGTGTCTATATCTATATGTGTGTGTGAGAGAGGTAGGTATG  
AGTGGAGCA

**Supplementary Fig S5.** Analysis of promoter sequence upstream of the ATG of *LOXC*, *AADC2* and *TPS* genes. The 1000bp promoter sequence of *LOXC* (a), 951bp promoter sequence of *AADC2* (b) and 1046bp promoter sequence of *TPS* (c) were analysed by New Place database. MYB2AT, MYBCONSENSUSAT and MYBCORE were highlighted in yellow; MYBOX1 and MYBGAHV were highlighted in green; MYB1AT was highlighted in blue; MYBST1 was highlighted in pink; MYB1LEPR was highlighted in purple; MYBATRD22 was highlighted in cyan; AMYBOX2 was highlighted in gray; MYBPLANT and MYBPZM were highlighted in bold and red.

**Supplementary Table S2 Primers sequence used in amplification, qPCR, yeast one-hybrid and dual-luciferase experiments.**

Name/ID	Primers Sequence	
	Forward (5'-3')	Reverse (5'-3')
SIMYB75	GCGGCCGCATGAATACTCCTATGTGTGCATCGT	CCTGCAGGATTAAGTAGATTCCATAAGTCAATA
q-SIMYB75	CCTCAACCTCGGAACCTCTC	TCTCCTATTGGCTTCTCACAAA
q-SIUBI	GCCGACTACAACATCCAGAAGG	TGCAACACAGCGAGCTTAACC
SIPAL/Solyc00g282510.2	AATTGCTTCTAGTCGTGGACAG	ACAAGGACTTGTCTCAGCTTCTG
SIANS/Solyc08g080040.3	ACGAACAGGATTTTGCTGCT	TTTGAGCTCAGCAACTGCAT
CHS1/Solyc09g091510.3	ACCAACAAGGTTGCTTTGCC	GAGATTCACTGGGTCCACGG
3GT/Solyc10g083440.1	AAACAAGGCAATGACACGCC	CCCTGTTTCTCCTCTGCTT
LOXC/Solyc01g006540.3	GCAATGCATCATGTGTGCTA	GTAAATGTCGAATTCCTTCG
LOXB/Solyc01g099190.3	ACATCGTGGCATAACAGGTCA	TGGATAGCCACCAGATAATTGGA
CXE1/Solyc01g108560.4	ATGCCAATGGTGATGGTCGT	ATCGGATCCTTCCCCCAGAA
TPS/Solyc06g060180.2	AAGATCTGGACCTGGCAAGC	TTGCGCGACTATACTGAGGC
ACS2/Solyc01g095080.3	TGTTAGCGTATGTATTGACAACTGG	TCATAACATAACTTCACTTTTGCATT
ACS4/Solyc05g050010.3	CTCCTCAAATGGGGAGTACG	TTTTGTTTGCTCGCACTACG
E4/ Solyc03g111720.3	AGGGTAACAACAGCAGTAGCA	CCCAACCTCCGTCTTCAC
E8/ Solyc09g089580.3	GGCACCATTCAACATACCG	CTTTCACGAAGAAGCACG
RIN/ Solyc05g012020.3	ATGCAGCACCATCAACACAT	CTCCAAATTCAAAGCATCCA
Bhlh150/Solyc09g065100.2	CCTCTCTTGGACGGTGTGT	GCTTGTGTGGCTCATTGAA
Solyc11g017470.2	CGAAACTTCAACGCGATTCC	TTCCCACTCACTCGGTTTCG
Solyc06g051260.3	TGAGATTCAGCAAGAGGGGT	CCGGTCCCACACATTCAAGA
AD-SIMYB75	CGGAATTCATGAATACTCCTATGTGTGCATCGT	CGAGCTCATTAAAGTAGATTCCATAAGTCAATA
AbAi-MYBST1	CTGGATAATGGATAATGGATAAG	TCGACTTATCCATTATCCATTATCCAGAGCT
AbAi-MYBCORE	CTCAGTTATTCAGTTATTCAGTTATG	TCGACATAACTGAATAACTGAATAACTGAGAGCT
AbAi-MYBPLANT	CAAACCAACCCAAACCAACCCAAACCCG	TCGACGGGTTGGTTTGGGTTGGTTTGGGTTGGTTTGGAGCT
AbAi-MYBPZM	CACCTACCCACCTACCCACCTACCCG	TCGACGGGTAGGTGGGTAGGTGGGTAGGTGAGCT
AbAi-AMYBOX1	CATAACAAATATAACAAATATAACAAATG	TCGACATTGTTATATTTGTTATATTTGTTATGAGCT
AbAi-MYB2CONSENSUSAT	CTTAACTGATTAAGTATTAAGTGAAG	TCGACTCAGTTAATCAGTTAATCAGTTAAGAGCT
AbAi-AMYBOX2	CATATCCATGATATCCATGATATCCATGG	TCGACCATGGATATCATGGATATCATGGATATGAGCT
AbAi-MYB1LEPR	CAGTTAGTTGAGTTAGTTGAGTTAGTTGG	TCGACCAACTAACTCAACTAACTCAACTAACTGAGCT
pGREEN62- SIMYB75	CGAGCTCATGAATACTCCTATGTGTGCATCGT	GCTCTAGATTAATTAAGTAGATTCCATAAGTCA
pGREEN0800-LOXC	CCCTCGAGTGAAGAGTTAATATTTAGTGAAAAT	GCGTCGACTTTTATTATTTCAAACCTTTAATTGA
pGREEN0800-LOXB	GGGGTACCGTTATATTTTAAATTCATTTGTTG	GCGTCGACGATTAAGTATTTAAACAGAAATATT
pGREEN0800-LOXF	GGGGTACCTATATATATATATATATATATATA	GCGTCGACTTTTTTAAAAAATAATGTTTGT
pGREEN0800-AADC2	GGGGTACCTAATAGTTATTGATTTTATTAATGA	GCGTCGACTCTTGGAGCTAAATTTTTTATTTTT
pGREEN0800-CXE1	GGGGTACCCGACTTAATATTTTAAATAATGG	GCGTCGACTGCTAAAAGCTAAGTTGCAAAGAAG
pGREEN0800-TPS	GGGGTACCTAATATTTTCAAGAAAAAATTTAA	GCGTCGACTGCTCCACTCATACCTACCTCTCT
pGREEN0800-ACS2	GGGGTACCTTGAGAAAATACTTTCTATGAAAAT	CCCTCGAGTTTTTTTTACTAAATGAGTTTAGAA
pGREEN0800-ACS4	GGGGTACCCAGTTAATAATTCAAAAATTTAAA	GCGTCGACTAGTCAAATCAATCAAAAAAAGGCC
pGREEN0800-RIN	CCCTCGAGTGTGACTATTGATAGAATCCATTCA	GCGTCGACATTGTATGAAGAAAAAATGTAAA
pGREEN0800-AP2a	GGGGTACCTTGGGTTTAAAGAAACAAGAGGAGAA	GCGTCGACTTCTTTTGTGATAGAATTTAAATG