

Fig. S1. Conserved direct and inverted elements in *PAL*, *CHI*, *CHS* and *PR-5* promoters. Elements conserved among seven UV-B inducible promoters (*MEB5.2*, *PyroA*, *Ubg3*, *CHI*, *CHS*, *PAL* and *PR-5*) identified in pairwise BLASTN comparisons are with solid arrows shown in their direct and inverted orientations, respectively, with slashes indicating single mismatches. Only those elements containing two or more guanine and cytosine identities in a minimum of seven contiguous nucleotides are displayed. The regions in these promoters sharing the identities are designated with numbers following each gene designation. To further clarify orientation, the designation for inverted elements are underlined.

CHI

AATTATCTCAATAACCAAAATATATAAAATCAATAATATGAAAGATAACGATAGAAAATATTTGAAATATATCCTAACATATGCTCTGCATATTTAAGG -218
GCTCAAGCTTCAACCAAAATTTGCAATGCATCTCCCAATCAAAAATATAAAAAAGAGACGAAAACGAAAGTACACGTGTTACACATCCAACACTCGT -118
AATCGTAACATATTGCTACCTACCCTCTCTCTCTACTTAACCCCAAAGGCCCAAAAACACAATCAAGAAAAGCTCTGTAACATTTATCAATCGAAA -18
TTCCAAACCGACTCAACAATG -3

CHS

ACTCTACGGCGTCTACGCCCTCGCATGCCTATCATATTTAACCGTCAATAATGGATTTGGCGGTTTTGGTAGCCGGGCAACCGGATTAAGAAAACGG -989
TTGGAGTCTCTCTTGCATTTGAATTTTACGCATCGGGTTTTGTGATTTCTCTGTCTATAATGGCCCGGCACATATGGTTTACATAACCCATGTGGGCT -889
ATGGTATAATTTTCCAATTAACAATTTGTTAGTTCGATAAAAACAAAACAATAAAAACGAGTGAATACACATACAAAAGAATGTGATGAACATT -789
AGTAATTTTATTTGATGGTTAATGAAAAACAAAATAATGCATCTTGACATCTCCCGTTGGAAAGCGCAAAATAGGCAGATTTTCAGACAGATATCACTA -689
TGATGGGGGTGGGAGAAAACAGGCGTACTTAATGTAACACTACTTAATAGTCGTTAGTTATAGGACTTTTTTTTTGGGCTAGTTATAG -589
GATCATAAGTAAAAATGAAGAATGAATATTAGATTAGTAGGAGCTAATGATGGAGTTAAGTAGTATGCACGTGTAAGAAGTGGAAAGTGAACCTCCTG -489
TATGGTGAAGAACTATACAACAAGCCCTTTGTGGTGTATACGTATTAATTTTTATTCTTTTATCACAAAGCGATACGTACTCTTAAGACATAATAAATA -389
TATATCTTACTCATAATAATATCTTAAGATATAATATACAGTATACACCTGTATATATAATAAATAGGCATATAGTAGAAAATTAATAGTTGTTGT -289
TGTTCGAAATATATAAATCAATCAAAAAGAAATTAACCCACCATTCCAATCTGGTAAAGTAAACGAAAACAGGGAAGCAAGAAGAACCCAGAAAAGGG -189
GGCTAACAACTAGACACGTAGATCTTCTATCGCCCGTCCATCTAACCTACCACACTCTCATCTCTTTTTCCCGTGTGAGTTGTTATATAAGCTCTCAC -89
TCTCCGGTATATTTCCAATACACCTAAGTTGTTAGTACACAAACGCAACATAAATCAATCAATATACCAAGTTGGTGTACTATAATG -3

PAL

TTTCACAAAATTTTATACTCAATTAACAATAACGAAAATGTACATTTGTATCTTTAACTATTTACGTTTTTTTTTACGTATCAACTTTCAGTTATATGTT -937
TTGGATAATATATTTTTTACTTTTACTTTTCACTTTTACCTAATGATTGGGATATACATATGCATGCATAGTTCCCATTTTAAATGTAAGCTAAG -837
TGCATATGAACGTGTAGTCAAAATACGAGTTTATTTGTACATATATATAGTTATAACAAAATGGTACAGTAAATTAACAGAACATCAAGAAAGTACA -737
AAAGCTGAACACATAAATTTTACATGAAAACAAAACACTTAAATAATCATCCGATAAATGAAATGATATCCCAATGACAAAATAACAATATAGAAA -637
ATACAAAACAAAACAAAATATGAAAGAGTGTATGGTGGGACGTTAATGACTCAATACGTTTACATATATACACACTTCCCATCACATGA -537
AACGCTTTACTCCAAAAAAGAAAACCACTCTTCAAAAAATCTCGTAGTCTCACCACCGGAAATGCAACTATCGTCAGCCACCGCCAGCACCA -437
CTTTTACCACCGTGACGTTGACGAAAACCAAGAAATTCACCACCGTGTAAAAATCAAAATTAATAAATCACTCTTTTTGCGACTTAAACCAATCCACG -337
AATTAATCTCCACCAATAAATCCACTACTCTCCATCTAACGGTCACTTAATTTCTCAACCACTCCTTCTTCTCACTAATTTTCATTTTTT -237
CTATAATCTTTATATGGAAGAAAAGAAAGACTAGCTATCTCTATACGTTACTACCAACAAACACTACCACCTTATTTAAACCACTTCACTCATCT -137
AATTTTCTCAGGAACAATAAATCCCTAACCAACAATATACAATAAGCTCCTATCTCTTTCTTTTCTTTAGAGATCTGTAATCTCTCTTAGT -37
TAATCTCTTATTTGTAAGAACTAAGATCAAAAGTCTAAATG -3

PR5

AAAAGCAACCTCATAGTCAACGGCAAGATCAATTAATTTCTCGGACCAAGTTGGTCAATTTATGAACAGTTTCTACGCTCAAGTCAGTCGTCT -958
CACCTTATAATCTTTAAGTCTCCCGTCACTAATCACTCCGTTTATATATCACTGATTTTATTTTATTTTCAATAAATATTTTTTTTA -858
AATACAGATTTTCTCAACTATGTTCTAGACTTCTAGAACCATAAAGATTACAATATATTAATAATGCGGGACAAAACACTACATAACGATACCATTTA -758
ACGTACGAAATATTTCTAATTTTACTTTCGTTTATAACCAGATTTTATACCTGTTTAGATGTTTACTGTTTTAAAACTACACATTCATGGTCATGGAG -658
GATATGATATCTAAAACCTTAGGATCAAGCTTCCGGTTCAGTAGCAAAATCAGGCTCTTATGATGCATCTGTTCCGGTCTTATAATCGAGGATTC -558
CACCAAAATAAAAGCATCGATCTATTCCGGTTTATACAATCATACTCATGGTTTACAACAGTCAACAACACATCTATCTGGTCACTGGATCTCAA -458
CTCGACCTCACAACAATAATCTAACCGATCCGGATCTCATATTCATTCGTTGATCACAATTAGACACATCTAATTTGGATCTCATAGTCGGGATCAC -358
Ubg3-1
AATTAATCTATCTATACAGATATCATACTCGGACCAACACATCAGATGACATAAAACATCACACTGAACCTTAAGTTTGTAGTGTGATCATGACG -258
ATGCCGAGTCAAAATGTTAAGATTTTTTTTTTACCATTTATAGTAACTAATGGAAATAAAACAGTAATGCAAGAAAATTCAGAGAACCAGAA -158
ATATCTATCAAGACCAAAAATCTAATGATTAATCATGACAACATTACGCTCACCCTCGAACCAACATCTATAAATAGAGGATCGGTGCCATTA -58
ACATTCATCATCATCACCACAGCACAGAGACACACAAAAACCCATAAAAAATATG -3