

- : ABA-responsive element
- : GA-responsive element
- : MeJA-responsive element

> *TaPP2C-a5 (TaPP2C89)* promoter

GCATTATTGTTGTTTTCTTCACCATAAGCTGATGCACAAGGAATGTAAGTACCCTGATGGACGGCTCAATATAACACCTTTGCACTCTTTAAATG CCTTTGTC
TTTTATAATGTCTATATACCACGGAGTCTGTTTCGGCGCGTATAGAAAAGATAAATGTGTGCCGATGAATCAAATAAGTTATAGTCATTATATAACTGATTGGAATT
GATTTAATGAAGTTATAATGCTTGTGTTGTTGTGTAGTGTGTTTGTCTTTGGGCGTTAGCACGTCGACTTTCTGGATGTCTACTTCAACAAGGTTTGTTCGACTG
CTGTGAAGGAGGGGTGAT TGACGGCGATGCCTCTTCAGCTCACTTCAATGCTTACAGTCGTTGTTAGATGATATGGATATAGTTTTTGTACCGTTGGTCTTTGTA
CTGCCATGATGTGATGAATAGATCAGAAGTCATCCCCACAAAAAATGTTTCTCGAATGTTGTATACCCGCTACTAATTTATTACTAATGTCATTATTACTTCTCT
GTCCGGGTTTATAGATGGTAATAGTACTGAAATGTTTGATACCTATCACTAATTTATTACCGGTGCCATTCTACTTCTATGTTTGAGTTTATAAACCATATTGAT
TTTGATAAAATTTAACCATGGGTGGGCTAGCAAAATATATTTATTTAAAAATATCATGTATTTGATTTGAACTTTTTTATATTGGTATTATTTACTACATACTC
CCTCTGTCTCAAAATATAAGATATTTTGGTCTAAATCTAGAACAAAAACGCTTTATTTAAGATAGGAGAGTATAATTTATGTTTTATTAACCAAGTTTATGATA
AAAAAATGACTGAAATACAAGGGGACTAACGAAACGAAGAAAGGGAGTACCAATTTGAGATGATGCATTTGGAATGCCTATCAAAACCTAACGAGTGCC
TCTTTGATTGATTGTAAAGTAGAAAAACACAGGAAGAGGGTGTCTGCCATTTCTGATATAGGATTGCTCCGATGTTTGATTGAGCACATGAAAACACATAGAA
ATCTTCATATAAGATTGAAGTGGATGAAAAATTTATCTATGAAATCTAGATCAAGTGAATCTTGGATTACATTCCTACGAGTCCAACGTTGTGTAGGGGAAAAAAA
ATCTAAGGATCAAAATCTTCAAAATAC CGTCACGAATCATTGAAATCAAGAGGTCTTGGGTGAGTAGGACAGCTAGGGTTTTGGTACCGCTTGAGAAATTCG
GTTACGGGGCAGATTGATGCCACAGAAATCACCTTACCGAGCAGGA TATCCAAAAAACAGTGAATTTAACTGAATTTGACTGAATATTATCCAATTTAAAA
TGTATTCAAAATTCGTTCTCCACAGTAACCAAAACCTCAATGCTTCATGAGATCTTATTTTCATCGGGGTCCAAAACCTTGGTGACAGCTTGTGTGCATCTACCA
GTTCTTGTCTACCACTCAAACTGCACAACATGCCCCACAGGCGT CATTCTCTCCATC CACGTAACCCCTCCCACTTCAATTACGGTCCCACGCGTTACCTAAA
AGCGCCAAACGTTAGATCGTTCCCTGGACCCTCCCAAGCACCAGCAAGCGACTAGAAAGCCTGGACCCGCCAGAAAGCCGACGCCCTCTCCACGGTCCA
TATGAGCCGCGGTACCACGCCGTCGCGAGCCCGAGACTCCGAGCCGCTCATCGCGCTGCCACGCGCTGCCGCGGCTCATCGCCGCGTCCACGTCCA
GGCCCGGAGATCCACGTCCGATACGGCTCCCGCCCTCGCTG CACGTATCGGGGCCATCTACGGGAAATCGGACGGCCCTGGAGCGCTGTCTAACCTTTTCC
CTCCCGTGGCCGCGGTATTAGAGGCGCTCGCGTCCACGCCACAGTTCTTTTGTCTCTCCGGCAAGGAAATGAGCAGCGAGACGAGCAAGCGAGA

> *TaPP2C-a7 (TaPP2C116)* promoter

CATCCTACTGATGTGGTCATGGACGACCAATGCAACCACCATATGTCCTATTGTCGATGAACAAATGAAGTTGTAAAGAAGTACTCATCTCCGCTATCCATG
GTACCTTGCAAGCAAAGCGTGAACACCTTGCGGCGTGGTGGAG ACGTGGCCGGAAGGGCATGTC GAGACCGTTGGTTGCAGCAAGGTGGTGCACCATGG
GCGTGGCGAGGGCGGAGCGATGACTGCGACGAAAAAGGGGTGCTCCACCGACGGCAAAGCAAGTGGT TGACGGCGGTGCCGCGCCGATGGCGAGG
GGCCGAGGGCGGAGCAACGAAGGGAAGAAATGGGGTTGTGTTCCGA CGGACGTGTCAGAAGAGGACAAGGGCGAGCGTCCCATCCGTCGCGTGATG
TCCGTTTGGCCGAAACGCGACCCAAAATGGGCCAGGAATGAATCGAAAACGGACCGAAAATTAACATTTGTTCTTTACTCTTGCAGTTGGCCGAGGTTTG
GTTGTTTACTCC AAACAGAGCGGGCGAACGATCTGGCCGTGCGTACGAGCTGCCCTCACTC TACGTGGTAGTTCAGTGGTACTGAGACCGCACAGTAGCCG
CGACAACTGCCACACAACAGTAGTGCCTCCCTCACTGCAGGAAGCACTGTTAGCTGCATGCCGCGCTGTAGCCCGCCGAAGTGCAGCGCAATGGTTTC
CCACGCCGAGCCGACGATCGTGGTACGCCACACAACGGCGCCAGTTCGCCACGCAGATCCATCTCTCAGCCACGCACGCGCGCTTTCCCGAGGTTCA
CCTCCCTTCCGCCCCACCGCA ACGTGGCCACGCCAGCCCCAACTACCAGCGCCTTCCCTCCCCACCCCAACGCAACGAGCACACAAAAGGCACCCC
CGGCCTCACGCCACGCGTCCCTCCTCCACGACCGACCAACCTCCACCGATCGCGACCGCCCTTAC CACGTGTCCCTCCCTCCACCCACCGCCTCCCA
CGTCCACAGCCCTACCCNN
NN
NN
NN
NN
CCCGCCGGCCATCGACCGTGCCTGATGGACCGGTACGACGGCCGGAGTAGAATAACCCCGTGAATTTCCGGGCGGCACAGGAGGCACAGCCATGTGTC
GCGGGCCCCGCGGCATCAATAAAGAAGTGCAGCGGGGCTGTCTCGCGGCGAGCCGC CACGTGTGTGCTGGCGATAACACCGCGTGCAGCGGTTAGC
ATCAGCTCCCGGTGGGGCCGAGATCGCGAG CACGTGTCGTCATCTGCCCGCGGGCGGCCACGCGTCCAGATCAGGTGGAGACGGACGGCGAGCACGTC
CGGACTCACGGCAGCGTAGCTTTCGGGCGCTCCCGCCAT GACGGCGAGGGCACCTCCCTCCCTTCTTACCGCCCAACCCGCGTGTGAGGTTGTTT

CGGCTCGGCCTCTGCTGCTTACTGCTGCCATTCGAGCTGGAAACGCGCGCAAGGTGCTGTAGTGTGTCGAGGTGTTTCGTGTAGGCCTCAGGG
TTTCCGTCGCCGACGTGCGGCGAGGGCAGTGGGAATCTAGGGCGGCGTCGGGGTCGAGCGAGCGATTACTTGCCA

> *TaPP2C-a8 (TaPP2C169)* promoter

AAACAAAACCACTTTGCAACAAATGCAAGAAGCAACTAGCAAGGATGTGGAGAGGGGCATTCATAATGCTCCAAGCTCGTAGGAAATTGTTTGTGAGCTGCAAT
GATGTTGGAATCGGACACTTTGTGACACCTGGTACATATTGTGCCATTATGCACAATAAATTATCAAAGACGAGGGTGAAGGGGCACTCGAACCCATGATTTG
AAGAAGCCCGGAGAAGAAGTCCACGCCCCAGATCAAGACGCAGATCATATTATGAATTTTCTGTAGATATGTCAGAATTTTCAAGATGAACAGGTGTGCGTGCAG
CTACTCCATAATCTTGTGGAGCATGTGGACCCACAATAAAAAATCAAGGATGAAACCAAGAAGTTAATGTTTGAATTGTTCACTTCATATAAAATTTTATGTTTGA
ACTCAATATTTTGTGATATTATGATGTATGCTGGACGGTTATATACATGGATTTAAAGATTTAGATATGAGGAGCATGGTTGCCATAAGGACTTTTGGAGGGCCGT
TCAATGCTGTCCGCGACGTTTGGGATGTCAGATTTCTAAATCCGATTGGATGCTCTGAATGTCGCTTGTGTTTATTAACATGGATTGTGGGTATTTGCATCTGTGA
CTGGTTGATCTCGTTTGGAGGTATACATGCTCTAGACCAGTTTTGCATGGGGTGTGCCCTACATTTCTGCATCGTTCTCGTAGTGTAAATTGCATTAGTACATCC
GAACTGAGCGTTCTGACGACGACCGAGGGATGTTTTAAGTTTCATGCGGGTGGTTTTTCTGCGAGTCAGCTAACCAACAGTTTAAAACCTAGCCCGGAGA
GTCTGATTGCGCTTGTGATGACAGCCATTTTCGAGCTTTGAACTCGCCATTTCTACTGGCCCTGGAGCCACCTGTAGCTCGCCGCTTGCATATCCCGCCGCTG
GCCCTCAACCCACGGACCCAATAACAACCTGAATCACCCTGAACAGCCGAGTTTCCCGGTTTCACTCCAAGCGGGGCCCGAGCGTGGCCCTCACTGT
TCCGCGCGCCCCACCTGGCCACCTCCCGCGCATACGTTCCCTCCTGCTCCCTGACGTTGACGACGACACAGAGAGAGCGGTAAAAAATCTCGCCCC
TCGCGGGGGCGGGCCCCGCGCGTTCCAGCCCTCGGGTGGCAGTAACATGCGCGCCAACAAGAGCAGACGTTACGCTCTCCCCGGCTCCGGTCCGCCG
GAAAATTTAAAACGCGTCTGCGAGGTCAAACGGGACACGAGTCGCCCCCTGCGCTCTGGGGGGCCACGGCGGTCTACGAGTGTCTCCCGGGCCCGA
GAGCAATGGGGTGGCGCACGGCGCGCAACCACCACCCCAACCCCGTTTTTTCATTTCTTTTCTTTTCTTTTGAATCCGCATCCGCATCATCAGATCCG
ACGGAACCTTTGCCCTGCCCGAGTTGGACCGCAACGGAGAATTTGGGAATCCCTGCTCCGCTAAACGGGACACGTCGAGTGTTTTACTCTCCGG
GGCCACGATCGCGTCCCGGTCCGCATCGCGCACCTGTGCCCGCATTATTCTATCCGAGCTCTGCTGTTCCGCGCGATTGGGTGGGGGGTTAGATTGGACT
TCAACAAAAACACACTAGCTTAGATTGATTATAGACTAGATTAGTTGATTATCGAGGGTGTATCGTGGCCGCTGTACGTTCCCGTTGGGGAGAGGGAGG
GTGAAGGGTGTGCGGTTGATGGGGCGGGCACGTTGCGTGGTGCAGCGCGCGTCCATGCGCAACTCGTGACGGCCCGGATGTTGCGTGGGGCGGTGGATGC
CACCATGTGTCGCTCCGCTGAGAGATGGCGACGCGCCATGGATGTGCCAGCCACCTGCGACTGCGCTTATAAGCGGGCGGCCACCAGAGACTCTCT

> *TaPP2C-a9 (TaPP2C121)* promoter

ACCAAACGACATGCAGAACATGGTTCAGAGCATGTATACACTGAACAGACTCCATTGAAAATGTACTCAAACACGCCCTCGATGATCTTATCAAGTCAGTGCAA
GCATTTGTGTTGGAAAACAGGGGAAGTTCGAGTTTTCGGAGAGAGATTTTGAAGAGCCTTTTCTAGGGCTTTCCCACAGTTTTCTTACCATAATGCGCAAGCT
TTACGGTGGCCCAATCACAGCAAGGAAAATATCGCGTGAGAACATGGTCCAGATGGCCGGCCGCTGTTATCCGAATGCCGTCGCACGCCACCGAAC
GAGCCCTGGCGCGACGTTCCAGTGTGCCTGGCCACAACTCCAACAAGTCCGGAATCATGGAGCCAGGACGTTCCCGTGTGTCCGTGTCTGCATGC
ATTGCCGCGGGGAAAAGATCTACTAGCGCACACGGCACACCTGTCTGGCTCTCGAGTGTGGGTCGACTTGCCTGCCACCGGTATGGCGGTGACCTGGATGG
CTGGCTGTTCACTGAGGACTCCGTTTCCATGAGTAGAAGAAGCTCTCCACTTTCTGCTATCTGTTTCTCGCCAGCAGATTCTGTGCCATGCGATATAAT
GCTGATCAATTAAGCTTCAAATGCAGGAGTTCGCGCAGCACCAACGGCCGTGAAATGACGCGCAGAAAACCTAGGCTGGGTGGTCTGGCCAGCTAGCTGTGTG
ATTACTCTATGCACATGCCATACCCGACGCGTGGTTTTTTTTNN
NN
NNNTTTTTTTCGAATTACCCGACGCGTGGCTTGTAGTGTGATTAGGACGTC
GCTCATGCTCGAGACGGGCACGTCCTCCCTTCTGTCGATGTGGATGGCTCCTCTCCTTTGTGCTGTGCACGTTCTGGCGTTCAGTTGAGTACATGGCATTG
TCACCACAAAATGGACGCCAGCAGCTAGCGTGGTCTCGATGCGATTTCACGTTATTCGCATGGCACTTCATATTTCTCGAGCATTGAGGGAGGCATGGGGTAG
ATGTGTTTCCGCCCCGATTGCTCTTAGGACCGCGCTCGAACGGCGCGGGTCTTTCTGTCGAGAGGAGAGAATGTGAAAGAGACGACAGAGCATATTCCAAA
ACCAAGGTAACAGCAAGAGGAACTAGAGATTCATCATGATTCGACGAACAAGTCAACAAATCAAGCCTGTGGAAGAATGCAAGTCCGATTGGCA
TCGAGGGATCCACGTAGTACGTTCCAGTGTGGCCACGCCATAAAGGCGCTAGCTAGTCTAGGCAAGGGCCATGGCATACTGGCATGGCGGACGACGGCG
ACCGGACACGAGCCGGCGCGGAAGAGCGTGGCCGTACACCACCCCTTGCCTCCTCACGTTTACCTCTGCGGCTTTCCCTCTTATCCCTCACGGATCGT
CACGTAGACTGGCCCTCCGCCCCGAGAGCAGCCACGGAGCCGCGCATACGTTCCCAACCCGCCACGGCCCGCGCAACGCCAAACCGGAAGCGA
TTCCGGCCCCCGCTCCGCCCCGACTCGGTAGCGCGGCGCGTGGCCAGCTGCTGCGCCCGGTGGACGCGCCCGCGCTCGACACGCGTCCCCGCGGCAC
GTACCGGCCACGCGGGGGGTACGTTGAGCCGCGCCGACGGCCCGCGCATCGACAACCTGTACGGGGCGGCCGCGCGTGGCACGTCGAGCCCTCCT

CCCCCGCCCCCTCACATTTATATGGAGGCGCCACTTGCTCGCTGC

> *TaPP2C-a10 (TaPP2C6b)* promoter

AGAAATAACTTGTGATGGGAGATTAATATGATGGAGAATAGACCCGGGGCCATAGGTTTCACTAGTGGCTTCTCTCGAGAGCATAAGTATTACGGTGGGTGAA
CAAATTACTGTTGAGCAATTGACAGAATTGAGCATAGTTATGAGAATATCTGGGTATGATCATGTATATAGGCATCACGTCCGAGACAAGTAGACCGACTCCTGCC
TGAATCTACTACTATTACTCCACATATCGACCGCTATCCAGCATGCATCTAGAGTATTAAGTTTCATAAGAACAGAGTAACGCTTTAAGTAAGATGACATGATGTAGA
GGGATAAECTCATGCAATATGATATAAACCCCATCTTGTTATCCTCGATGGCAACAATAACAACCTTGCTGCCCCTACTGTACTGGGAAAGGACACCGCA
AGATTGAACCCAAAGCTAAGCACTTCTCCATTGCAAGAAAGATCAATCTAGTAGGCCAAACAACTGATAATTGGAAGAGACTTGCAAAGATAACCAATCATA
CATAAAAGAATTCAGAGAAGATTCAAATATTGTTTCATAGATAAACTTGATCATAAACCCACAATTCATCGGTCTCAACAAACACACCGCAAAGAAGATTACATCG
AATAGATCTCCACAAGAGAGGGGAGAACATTGTATTGAGATCCAAAAGAGAGAAGAAGCCATCTAGCCAATAACTATGGACCCGAAGGTCTGAGGTAAACTA
CTCACACATCATCGGAGAGGCTATGGTGTGATGTAGAAGCCCTCCGTGATCGATGCCCTCCGGTGGAGCTCCGAAAAGGCCCAAGATGGGATCTCACGG
GTACAGAAGGTTGCGGCAGTGGAATTAGGTTTTTGGCTCTGTATCTGGTAGTTTGGGGTACGTAGGTATATATAGGAGGAAGAAGTACGTCGGTGGAGCAACGT
GGGCCCACGAGGGTGAAGGGCGCGCCCCCTACCTCGTGCCCTCCTGGTTGATGTTTTGACGTAGGGTCCAAGTCTCTGGATCACGTTCCGTTCCGAAAATCAC
GTTCCGAAGGTTTCATTCCGTTTGACTCCGTTTGATATTTTTTCTACGAACTCTGAAATAGGCCAAAAAACAGCTATTCTGGGCTGGGCCCTCCGGTTAATAG
GTTAGTCCAAAAATAATATAAAAGTGATAATAAAGCCATTAATGTCCA AACAGAAATATAATAGCATGGAACAATCAAAAATTATAATTGGCTCCACATG
TTCAAGTAGTAACAGCTACACTACTCTAATGCAAGCAGTAGAGAGAAAGAGTAGGCGGTATCGGGATGATCAAGGGGTTTTGCTTGTGTTGGATTCCGCCTAG
GAGACGAGACACAATCTCTCAAATTTTTTTTTTAGGATCCACGATCTTCTCAATCGGACGGTACGGCTCGGAGAGACTGAAAAGCGCAGCTGCACTTTTAAG
TAGTATGAAAAAAGCATTTCAAATTTGGGCCGTCGGGGTACTACTACTGGAGAGGGTGCCAGAAAACGATTGAGGGTTCTCCAGAAAAAAGGGAAA
CGATTGAGGGGAGGGGAGGGGAGGGGAGGGCGCGCAGCCAACACGCAGGCATTGGCGGGTGGTCCGGGTGCGATGACGTGCGCCACGTGCCCCG CAC
GTGGCCCCGACGGGCATCCGACGTGACGCGAGACAGAGGAACAAACCCACTTCTCCTCCTCTCTTCTTCTCCTCCTCCCTTTGAACCAACCCAACCCAAC
CAGAGGAGCTCTCTCTTTATAGCAATAGCAATAGCTATAGCCATAGGTAGCATAGCAGTAACCAGAGAGAGACACTCTCACTCATGGGATTCGCTCCGC
TCTGCTGCTGCTTGTCGGTACCCGCCGCGCCTCCTGTTCTCCTCTTTTTCTCCACCCCGTGCCCGTGTGAGTGTGACCGACCGCCCGCCTCATCCATCC