

**S10 File. The gene model for *RcWRKY22*.** The coding region is marked with uppercase letters, above which is its deduced amino acids. The transcribed untranslated regions, including 5' UTR, intron and 3' UTR sequences, are marked with lowercase letters. The start and stop codons are blacked and the fourth exon misannotated is boxed.

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1                                     M E K V
1 atgtgctggtgatttttattatatgtacttgacaatttaagggttctATGGAGAAAGTT
5 R E E K K M I K I G N S S A A V A A N S
61 AGAGAAGAGAAAAAAATGATAAAGATTGGGAATTCATCGGCTGCAGTTGCTGCAAATTC
25 T T F I S E L Q E E M P S I N V S L P L
121 ACGACATTCATTAGTGAGCTACAAGAAGAGATGCCTAGTATTAATGTTTCTTTACCATTA
45 S S A A S S I T T T S I F D M M M P C D
181 TCATCCGCTGCATCATCAATAACAACAACAAGCATCTTTGACATGATGATGCCATGTGAT
65 Y M G E K G Y S L G F L D L L D G N N Q
241 TATATGGGTGAAAAAGGTTATTCTTTAGGTTTCTTGGAAGTTGCTGATGGGAATAACCAA
85 D F G A T S S L F D W F Q F Q T P I L P
301 GATTTTGGTGCTACTTCTTTGTTGATTGGTTTCAGTTTCAGACTCCAATTTTACCC
105 D H H Q Q Q Q Q P L P S P A S T V P E T
361 GATCATCATCAGCAGCAGCAACAACCACTACCATCACCGGCATCTACAGTGCCTGAAACG
125 S E V L N T P A T P N S S S I S S S S N
421 TCGGAGGTGTTAAATACTCCGGCGACTCCTAACTCTTCATCGATCTTTCATCATCTAAC
145 E A G I D S S S Q V K A G D E D E Q D Q
481 GAAGCTGGAATTGATTCTTCTTCAAGTTAAGGCTGGAGATGAAGATGAACAGGATCAA
165 D K N K K Q
541 GACAAGAATAAGAAACAgtgagtttttattttattttattaagcgtggttatgggtggtt
601 tcttttttcttttcttgatagattttggttctttctttggtggttattgtttta
661 cttagttaagtgagctagtttggatgaaacatgaagttgaaaagtgataagtcagtg
721 tgggttctgtttctctttatgtttctgcaatttatggggtttctttagaattactg
171                                     L K P K K K N Q K R Q R
781 aaagtgtaatgttttatgggttttagGTTGAAACCGAAAAAGAAGAACCAAAAAAGGCAAA
183 E P R F A F M T K S E V D H L D D G Y R
841 GAGAACCAAGATTTGCTTTCATGACAAAGAGTGAAGTTGATCATCTAGATGATGGGTATA
203 W R K Y G Q K A V K N S P Y P R
901 GATGGAGAAAGTACGGCCAAAAAGCAGTGAAAAACAGCCCTTATCCAAGgtatcatgaaa
961 atattatctttcatcttctctctatatatatatatatatatgttaatgttaatggctct
1021 gatacggttttatgtatattaatcaaattttacttgtattgcaagaatatgcaacccttt
219
1081 tttaggtttggtcttgtgctaaaaaaagattgtaatttttttttttttttttcgcagG
219 S Y Y R C T S A G C G V K K R V E R S S
1141 AGCTATTATCGTTGCACTAGTGCAGGATGTGGAGTGAAGAAGAGAGTAGAGAGATCATCT
239 E D N T I V V T T Y E G Q H T H P S P V
1201 GAAGATAACACTATTGTTGTTACGACTTATGAAGGGCAACACACGCATCCAAGCCCAGTA
259 T P R G S I G F L P D S S A F G A A N S

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1261 ACACCAAGAGGAAGCATCGGATTTTTGCCAGATTCAAGTGCTTTTGGTGCTGCAAATTCT  
279 S F V I P Q P R P Y Q Q Q Q Q Q Q H A Y  
1321 TCTTTTGTATTCCACAACCTCGTCCATACCAGCAGCAGCAACAACAACATGCCTAT  
299 M Y S S S P S L N I T T S T S S S I N P  
1381 ATGTATAGTTCATCACCTTCTCTCAACATTACCACCAGTACAAGTAGTTCATTAATCCT  
319 P F S P S F L H H E R R F S P S P A S L  
1441 CCATTCTCTCCAAGTTTTCTTCATCATGAGAGACGGTTTAGTCCTTCACCAGCTTCTTTG  
339 V R D H G L L Q D I V P S Q M R K D A T  
1501 GTTAGAGATCATGGTCTTCTTCAGGACATAGTGCCATCCCAGATGAGAAAGGATGCTACA  
359 E E \*  
1561 GAGGAGTAAatgaaggacgttattaaggtttcgtgtagttactggtatgtaattctcta  
1621 actgacttatatggatcatcatcatcagcagcaccatttcatgacacagaaccttattg  
1681 ttggaaatgatgatgatggctatagccttttagcttatgcaggcctagctagttttcttt  
1741 ttctttttctcttttggttcttttctgttattaattctttgtatccagagattatctttt  
1801 tatgaagataattgagttttgtatcatccttttccccactctagtagttattattccat  
1861 ttcttta