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1      AAAAACCCAAGAAAAGTCTCTCTCTTTCTCTCTCTCCTAGCTAGCCCCGATCTGGCCCT
61     CTCTCTCACGCGCTCTAGAACTAGAAGGGCATCCGCAGAAAGTTGACCACGTACAGCAGCG
121    GCAGCGCGGGCTCCTCCTGTTATATAACGCCCGCCTCTCGCCGCTCTCCAGCTTCTTCTT
181    AATTTCTCTTCTATGATACAGGGGTAGGAGAAGGAGGAGGAGTAGAAGCAGCTCCAC
241    ACCTGTACGTAGCTGCCGCGCGCGGTGAGCGAGGTCGTTCTTGAGAGCTGTATATATAT
301    ATATAGCTCCGCGACGACGCCGATGATGGCCATCAAGTCTGCTGAGCATGGTGGAGGCCAG
1      M M A I K S L S M V E A S
361    CCTGCCTCCGGGTTTCAGGTTCCACCCGCGGACGACGAGCTCGTGTGGACTACCTGGC
14     L P P G F R F H P R D D E L V L D Y L A
421    CAAGAAGCTCGGCGCGGGGAGGCCCTGTGGTGGTGAAGCATCTACGGCTGCCCCACCAT
34     K K L G G G G G P V V V S I Y G C P T M
481    GGTGACGTCGATCTCAACAAGTGCAGCCCTGGGACCTTCCGACATCGCGTGCATTGG
54     V D V D L N K C E P W D L P D I A C I G
541    TGGAAAAGAGTGGTATTTCTACAGCCTTAGAGATAGAAAAGTATGCCACTGGCCAGCGTAC
74     G K E W Y F Y S L R D R K Y A T G Q R T
601    AAACAGAGCAACTGATTCGGGATACTGGAAGGCCACAGGAAAGACCGTCCAATAAGCCG
94     N R A T D S G Y W K A T G K D R P I S R
661    GAAAGGGTTACTTGTGGTATGCGCAAAACCCTTGTGTTTTATCAAGGTAGAGCCCCAAA
114    K G L L V G M R K T L V F Y Q G R A P K
721    GGGAAAGAAGACCGAGTGGGTTATGCATGAGTTTCGCATGGAAGGGCGAGATGATCCCAT
134    G K K T E W V M H E F R M E G R D D P M
781    GAAATTACCTTTCAAGGAGGACTGGGTCTTGTGTAGAGTTTCTACAAGAGTAGGGCAAC
154    K L P F K E D W V L C R V F Y K S R A T
841    AGTTGCAAAGCCGCCACAGAGAGCAGCAGCTTCAATATTGATGCAGCCAAACTTCATT
174    V A K P P T E S S S F N I D A A T T S L
901    GCCTCCCCTTATTGACAACAACCTCAATATCTCCTTTGACCAGCCTGGCTCATCATCAGT
194    P P L I D N N F N I S F D Q P G S S S V
961    GCAGAACCTAGAGGGTTATGAGCAAGTGCCTGCTTCTCCAGTAACCCCTCTCAGCAGCC
214    Q N L E G Y E Q V P C F S S N P S Q Q P
1021   ATCGTCGTGATGAACGCCGCGCGCTGCCGCGCTGCGCCATGGCTGATCCGGAGCA
234    S S S M N A A R L P P S A A M A D P E Q
1081   GCAGATGGGAAAGTCAATAATCAAGGATGTTCTCATGAGCCAGTTTAGCAGGTTTCAAGG
254    Q M G K S I I K D V L M S Q F S R F E G
1141   CAGCGTCAAGAGGGAGGCCCTCCAAGCAATTTTCTCAGGATGGGTTTGAGTACTTAGC
274    S V K R E A P P S N F S Q D G F E Y L A
1201   TGAGAGTGGCTTACGCAGATGTGGAATTCGTTCAATTAGTTGATTATGTTTATAGGAA
294    E S G F T Q M W N S F N *
1261   GATTATATATATATTATTGTTATGGAGAGCGATGCGGATCGAAATGCCTCGACGATAACA
1321   GGATGGATATATAGATGAGTGCTACAAGAGGCTTGGGTGTGTGCTCCTGTGTGGTAT
1381   TGCATGTAGCCGTAGTAGTAGTAGGTATATATACATATAGTAGCAGTACCATCTCAGT
1441   ACACATCCTTCAAAAAGAAGGAGAAATGAAAAGAGAGATATATATATGTCTGTATGCCCT
1501   ATGCCATCAATTAATGACGACAGATGTGTAATAACATTATTTGTGTACTATGGAGAAATC
1561   AGAAGGAAAAAATACAGTGCGTACGTGATGACAAAAACAAGAATAGAATTTTATTCAT
1621   ATGGTCCGTTGTCTATTAATAAAAAAAAAAAAAAAAAAAAAA

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Additional file 3. The full-length cDNA of *ZmNAC1*

This figure shows the full length cDNA of *ZmNAC1*, in which the highly conserved region of the NAC domain is boxed; the red box indicates the (NLS) nuclear localization signal as noted between amino acids 121 and 138.