

>TraesCS7A02G441400

GACGCGCCCGGGCTCGGCCTCCCTCCCTCACGCCTCCGTCCCCGTCCGGCACCAAACCCATCCCATCCCCTCCC
CCCTTTTCTTCCACACCTGACCAACGATAGCCAGGCCACCGCACCCGCAGTTTCGTGCACCGCACTTCTCCACC
CACCACCTACCTCCCTCCCCCTCCCGTGTTCCTCCCTCCAAACCTATCGCCGCGGACCATCCACCCACC
GACGATCGATTACGGGACTCGGAGTCGGCGTCGGCGGCGGGCGGTGGCAGAGGGAGTCCGCCAGATCCGGC
CGCGGCGGGATGATGAAGCAGCTGCTGCCGAGAGCCAGCTGCGGCGCTCGGCGGCGGGCTCGGCGGGCG
GCTCCTCGGGGGCGGGTTCGAGGGCGCGGGGGCCCCGACGGCGCGGGCGCGGGCGGGCGGGCGGGCGGA
CCGCCTCCTCCACCTTCTGGTTCTGCTGCACGCGCTCTGCTGCCTCATCTCGCTTCTCCTCGGCTCCCGCT
CTCCAGGCTGCTCTTCTTCTGCTCTTCTCCAGCAGCGCTCTACGCGGCCACCTCCAACAACAAGTCGGCCG
TGCTCCGCGCCATCACCACCACCACCACCACCACGACCACGACGACCACCACCACCAACACCTTACCCTCTCC
TTCGCCGCGGGCAACCCGCCCCCTCCAACCCGGACAACCTCACCGCCGCGCGCTCGAGGAGGCCGCG
GGAGCACGCAGAGCCACGTCGTGGTCGGCCGACGGATTCCGATCCGCCCTGGCCGACCCCGACCC
GTCGAGGTCATGCGGGCGCACCGGATCATGGAGCGCGTGCAGGAGGAGCAGCGCCGCTGGTACGGCGTACG
GGAGCCGCGCCAGGTGCTCGTCGTCACCCGACCTACTCGCGCGCTTCCAGGCGCTCCACCTCACCGGCCTC
CTCCACTCGCTCCGCAACGTGCCCTACCCGCTCACCTGGATCGTCGTCGAGGCCGGCGGCGTACCAACGCCA
CCGCGGCCATGCTTGCGCGCTCCAGTCTCACCTTCGTCCACGTCCCCTTCCCGAAAAAATGCCCTCGAATGG
GCCGACCGCCACGCCACTGAGAACCGCATGCGCCTCCACGCCCTACGGGTGATCCGGGAGAGGAAGATGGA
CGGTGTGGTTGTGTTGCGGATGACAGCAACGTGCATAACATGGAGCTGTTTCGATGAGGTGCAGAAGTCCA
GTGGATGGCCGCGGTGTCTGTGGGTATCCTTGCACACCCGAAACAGCAGAGCAGCCACGCCTCACCGAAGA
GGACAAGAAGAACATGCCTCTTCCAGTCCAGGGTCTGCCTGCAACTCTCCGGGCATTTGGCTGGGTGGCAC
ACATTCAACACGTTGCCGTTCTCTGGGAAGACCGCCACGGTGGTTGGCGAGGCAGCGCCGGTGTACCGAAG
GGTTGGAGTGGGCTGGGTTTGTGATGAACTCGAGAATGCTGTGGAAGGAGGCAGAGGGCAAGCCTGATTG
GGTGAAGGACCTTGATGCTGTTGGAGAGAATGGGGAGGAGATTGAAAATCCTTACTCTTGAATGACGC
GTCCTATGTTGAGCCGTTGGGAACTGTGGGAAAAAGGTCTACTCTGGTGGCTCCGTGTTGAAGCCCGGGC
CGACAGCAAGTTCCACAAGGTGGGTGATTGAGCCACCTCTGGAGTCGTTGTTCCCGCAAGCGCACACC
ATGGCCAGAAACCACCATGGATGTTTCATCGGAGATGTTGGATGCCAAGCAAGAGCAGGAGGACAGGCAGC
TGCCAAGGACCAACAACAGGTCAGCCAGGCCCGAAGCACCACCACGAAACGGAAGGGCGACGTCCACAAC
TGAGGCAGGATAAACAGACCATGTAATGTACATCTCACACCACCTTACACCGCGGTATCTGCAATAGGAGGC
ATGTCCGGTCGATCTAGTGGGTATTGTGTTTATTTTTTTGTTTCTGATGTTTTGCTCTGGTGGTAACGACGAC
GCCTCGTGCTGGGGATATGTCTTCCATAGAAGACCGTTTGTTCGTTATCTGTAGCTCTACCTGTTGTGCTGTA
ATATAACACCGCAGTTGATGTCTCAAGAAAATGGCGTCTGAATTCTGGATGACCTATACGCATGTCAACTCTG
AAGTATGTATCTTGCATGAATGTTTTCAAGGCACAGTTTCCCCTTTATTGGGGCGTCTGACAACCTTTACTG
GAC

>TraesCS7A02G441400 amino acid sequence:

MMKQLLPQSQLRRSAAASAARSSGGVEGAGGPDGAGAGAGGRTASSSTFWLLHALCCLISLFLGFRFRSRLFFL
LFSSSALYAATSNNKSAVLRAITTTTTTTTTTTTTNTFTLSFAAAGNPPPSNPDNLAAALEEAAGSTQSHVVVGRH
GIRIRPWPHPDPVEVMRAHRIMERVQEEQRRWYGVREPRQVLVVTPTYSRAFQALHLTGLLHSLRNVYPYPLTWIV
VEAGGVNATAAMLARSSLTFVHVPFPEKMPLEWADRHATENRMLHALRVIRERKMDGVVVFADDSNVHNM
ELFDEVQKVQWMAAVSVGILAHGTAEQPRLTEEDKKNMPLPVQGPACNSSGHLAGWHTFNTLPFSGKTATVV
GEAAPVLPKGLEWAGFVMNSRMLWKEAEGKPDWVKDLDAVGENGEEIENPLLLNDASYVEPLGNCGKKVLLW
WLRVEARADSKFPQGWVIEPPLEVVPKTRTPWPEITMDVSSEMLDAKQEQEDRQLPRTNNRSARPRSTTTKRK
GDVHN

>TraesCS7B02G340100

ACGCCTCCGTCCCCGTCCGGCACCAAACCCATCCCATCCCCTCCCCTCCTCCTCCCTTTTCCACACTGACCAACG
ATAGCCAGGCCACCCGACCCGAGTTTCGTGCACCCCACTTCTCCACCCACCACCTACCTCCCCCGTGTTCCCC
TCCCCCTCAAACCTATCGCCGACACCATCCACCCACCGACGAGCGATCGCCACGGCCGATTGATCCACAG
CGCGGGGCGGTGGCGCACCAGATCCGGCCGCGGGCGGCGATGATGAAGCAGCTGCTGCCGAGAGCCAGCTG
CGGCGCTCGGGCGGCGGCTCGGGCGGCGCTCCTCGGGGGGCGGCGTGGGGCCGAGGGCGCGGGTGGGC
CCGACGGCGTCCGGCGGGGCGGGGGCGGGCGGGACCGCCTCCTCCTCCACCTTCTGGTTCCTGCTCC
ACGCGTTCTGCTGCCTCATCTCGCTCTTCTCGGCTTCCGCTTCTCCAGGCTGCTCTTCTCTGCTCTTCCAG
CAGCGCGCTCTACGCCCCACCTCCAACAACAAGTCGGCCGTGCTCCGCGCCATCACGACAACCACGACGACG
ACCACGACGACCACAACCACGACCAACACCTTACCCTCTCCTTCGCCGCCGCGGGCAACCCGCCCGTCCAA
CCCGGACAACCTCACCGCCCGCGCTCGAGGAGGCCGCGGGGAGCACGAGAGCCACGTGGTGGTCCGCC
GCCACGGGATTCGGATCCGCCCTGGCCGACCCCGACCCCGTCGAGGTCATGCGCGCGCACCCGGATCATGG
AGCGCGTGCAGGAGGAGCAGCGCCGCTGGTACGGCGTCAGGGAGGCGCGCCCGGTGCTCGTCCACCCCG
ACCTACTCGCGCCTTCCAGGCGCTCCACCTACCAGCCTCCTCCACTCGTCCGCAACGTGCCCTACCCGCT
CACCTGGATCGTCCGAGGCCGGCGGCGTACCAACGCCACCGCCTCCATGCTTGCAGCGCTCCAACCTCACC
TTCGTCCACGTTCCATTCCCGGAAAAAATGCCCTCGAATGGGCCGACCCGCCACGCACTGAGAACCGCATGC
GCCTCCACGCCCTACGGGTGATCCGGGAGAGGAAGATGGACGGTGTAGTTGTGTTGCCGATGACAGCAACG
TGATAGCATGGAGCTGTTTCGATGAGGTGCAGAAGGTCCAGTGGATGGCCGAGTGTCTGTGGGTATCCTTG
CGCACACCGGAACAGCAGAGCAGCCACGCCTTACCGAAGAGGACAAGAAGAACATGCCACTCCAGTCCAGG
GTCCTGCCTGCAACTCTTCCGGGCATTTGGCTGGATGGCACACATTCAACACGTTGCCGTTCTCTGGGAAGAC
CGCCACGGTGGTTGGCGAGGCAGCGCCTGTGCTACCGAAGGTTTGGAGTGGGCTGGGTTTGTGATGAACTC
GAGAATGCTGTGGAAGGAGGCAGAGGGCAAGCCTGATTGGGTGAAGGATCTTGTGCTGTGGGGGAGAAT
GGGGAGGAGATTGAAAATCCTTACTCTTGAACGATGCGTCTATGTTGAACCGTTGGGCAACTGTGGGA
AGAAGTCTACTTTGGTGGCTCCGTGTTGAAGCCGGGCGGACAGCAAGTTCCACAAGGAGTGGGTGATTG
AGCCACCTTTGGAAGTTGTTGTTCCCGCCAAGCGCACACCATGGCCAGAAACCACCATGGATGTCTCATCGGA
GATGTTAGACGCCAAGCAAGAGCAGGAGGACAGGCAGCTGCCAAGGACCAACAACAGGTCAGCTCGGCCCC
GAAGCACCACCAGAAACGGAAGGGCGACGTCCACAACGAGGCAGGATAAAACAACCATGTAATGTACATC
TCACATCACCTTACACCCGCGGTATCTGCAATAGGAGGCATGTCCAGTCGATCTAGTGGGTATTGTGTTTATT
TTTTGTTTCTGATGTTTTGCTCTGGTGGCAACGACGACGACGCTCTCGTGTGGGATATGTCTTCTAGAAGA
CCGTTTCGTTATCTGTAGCTCTACCTGTTGTGCTGTAATATAACCCGAGTTGTTGTCTCAAGAAAATGGTGT
CTGAATTCTGGATGACCTATACGCATGTGACTCTGAAGTATTGTGTGATCAGTGTTCAGG

>TraesCS7B02G340100 amino acid sequence:

MMKQLLPQSQLRRSAAASAARSSGGVGAEGAGGPDGVGAGAGAGGRTASSSTFWLLHAFCLISLFLGFRFS
RLLFFLLFSSSALYAATSNNKSAVLRITTTTTTTTTTTTTNTFTLSFAAAGNPPSPNDNLTAALAAEAAAGSTQSHV
VVGRHGIRIRPWPHPDPVEVMRAHRIMERVQEEQRRWYGVREARPVLVVPTYSRAFQALHLTGLLHSLRNVPY
PLTWIVVEAGGVTNATASMLARSNLTFVHVHPFPEKMPLEWADRHATENRMRHLALRVIRERKMDGVVVVFADDS
NVHSMELFDEVQKQVQWMAAVSVGILAHGTAEQRLTEEDKKNMPLPVQGPACNSSGHLGAWHTFNLTLPFSG
KTATVVGEAAPVLPKGLEWAGFVMNSRMLWKEAEGKPDWVKDLDAVGENGEEIENPLTLLNDASYVEPLGNCG
KKVLLWWLRVEARADSKFPQGWVIEPPLEVVPKRTWPETTMDVSSEMIDAKQEEDRQLPRTNNRSARPR
STTKRKGDVHN

>TraesCS7D02G430700

ACACCTGACCAACGATAGCCAGGCCACCGCACCCGACGTTTCGTGCACCGCACTTCTCCACCCACCACCTACCT
CCCCCGTGTTCCCCTCCCCCTCAAACCTATCGCCGCGGACCATCTACCCACCGACGAGCGACTGCGGCCGA
TTGATCCGCAGGGCGAGGCGGTGGCGGCGGAGGGAGCCCACCATCCGGCCGCGGCGGCGATGATGAAG
CAGCTGCTGCCGACAGCCAGCTGCGGCGCTCGGCGGCGGCGTCCGGCGGCGGCTCCTCCGTCAGCGGGGT
CGAGGGCGCGGGGGGCCCGACGGCGTCCGGCGGCGGCGCCGGGGCGGCGGGCGGACGGCCTCCTCCTCC
ACCTTCTGGTTCTGCTGCACGCGCTGCTGCCTCATCTCGCTTCTCCTCGGCTTCCGCTTCTCCAGGCTCCTCT
TCTTCTGCTCTTCTCCAGCAGCGGCTCTACGCCACCTCCAACAACAAGTCGGCCGTGCTCCGCGCCATC
ACCACCACCACCACCACCACCACCACCACGACCACCACCACCAACACCTTACCCTTCTCCTTCGCCGCCGCGGG
CAACCCGCCCGTCAACCCGGACAACCTACCGCCGCGGCTCGAGGAGGCCGCCGGGAGCACGCAGAG
CCACGTGGTGGTCCGCCACGGGATTCGGATCCGCCCTGGCCGCACCCCGACCCCGTCCGAGGTCATGCG
CGCGCACCGGATCATGGAGCGGTGCAGGAGGAGCAGCGCCGCTGGTACGGCGTCAGGGAGCCGCGCCAG
GTGCTCGTCTCACCCGACCTACTCGCGCGCTTCCAGGCGCTCCACCTACCGGCCTCCTCCACTCGCTCCG
CAACGTGCCCTACCCGCTCACCTGGATCGTGTGAGGCCGCGGCGTACCAACGCCACCGCCTCATGCTC
GCGCGCTCCAGCCTCACCTTCTGTCACGTCCTTCCCGAAAAAATGCCCTCGAATGGGCCGACCGCCACG
CCTACTGAGAACCAGCATGCGCCTCCACGCCCTACGGGTGATCCGGGAGAGGAAGATGGACGGTGTGGTTGTG
TTGCGGATGACAGCAACGTGCATAGCATGGAGCTGTTTCGATGAGGTGCAGAAGGTCCAGTGGATGGCCGCG
GTGTCTGTGGGTATCCTTGCACACCCGGAACAGCAGAGCAGCCACGCCTTACCGAAGAGGACAAGAAGAAC
ATGCCTCTTCCAGTCCAGGGCCCTGCCTGCAACTCTCAGGGCATTGGCTGGATGGCACACATTCAACACGTT
GCCGTTCTTGGGAAGACCGCCACGGTGGTTGGCGAGGCAGCGCCGGTGTACCGAAGGGTTTGGAGTGGG
CTGGGTTTGTGATGAACTCTAGGATGCTGTGGAAGGAGGCAGAGGGCAAGCCTGATTGGGTGAAGGACCTT
GATGCTGTGGGGGAGAATGGGGAGGAGATTGAGAATCCTTACTCTTGAATGATGCGTCTATGTTGAG
CCGTTGGGGAAGTGTGGGAAGAAGTCTACTGTGGTGGCTCCGTTGTAAGCCCGGGCCGACAGCAAGTTC
CCACAAGGTGGGGTGATTGAGCCACCGTTGGAAGTTGTTGTTCCCGCAAGCGCACACCATGGCCAGAAACC
ACCATGGATGTCTCATCGGAGATGTTAGACGCCAAGCAAGAGCAAGAGGACAGGCAGCTGCCAAGGACCAA
CAACAGGTCAGCCCGGCCCGAAGCACCACCACGAAGCGGAAGGGCGACGTCCACAACCTGAGGCAGGATAA
ACAGACCATGTAATGTACATCTCACACCACCTTACCCGCGGTATCTGCAATAGGAGGCATGTCCAGTGCAT
CTAGTGGGTATTGTGTTTTTTTTTTTTTCTGATGTTTTGCTCTGGTGGTAACGACGACGGCCTCGTGTGG
GGATATGTCTTGTAGAAGACCGTTTCGTTATCTGTAGCTCTACCTGTTGTGCTGTAATATAACCCGAGTT
GATGTCTCAAGAAAATGGCGTCTGAACTTGGATGATCTATACGCATGTCAACTCTGAAGTTTGTATCGTGTGAT
GAATGTTTTCAAAGCACAGTTTCCCTTTTATTGGGGCGTTGTACAACTTTTACTGGACTGTACCCCTCGGTAT
AGTTGGTGATCTAAACGCTCTCATATTTCTTACAAAGGGTATATTAGTACTGCCTCCGCTCACAAATGTAAGA
CGTTTTCTGGGGACATTATGAGACGTTTTCTGGGCGGACAT

>TraesCS7D02G430700 amino acid sequence:

MMKQLLPQSQLRRSAAASAARSSVSGVEGAGGPDVGVGAGAGAGGRTASSSTFWLLHALCCLISLFLGFRFSRLLF
FLLFSSALYAATSNNKSAVLRAITTTTTTTTTTTTTNTFTLSFAAAGNPPPSNPDNLAAALEEAAGSTQSHVVVG
RHGIRIRPWPHPDPVEVMRAHRIMERVQEEQRRWYGVREPRQVLVVTPTYSRAFQALHLTGLLHSLRNVYPYPLT
WIVVEAGGVTNATASMLARSSLTFVHVPFPEKMPLEWADRHATENRMRLHALRVIRERKMDGVVVFADDSNVH
SMELFDEVQKVQWMAAVSVGILAHGTAEQPRLTEEDKKNMPLPVQGPACNSSGHLAGWHTFNTLPFSGKTAT
VVGEAAPVLPKLEWAGFVMNSRMLWKEAEGKPDWVKDLDAVGENGEEIENPLLLNDASYVEPLGNCGKKVL
LWWLRVEARADSKFPQGWVIEPPLEVVPKTRTPWPETTMDSSEMLDAKQEQEDRQLPRTNNRSARPRSTTT
KRKGDVHN

S1 Figure: *Triticum aestivum* GT43_1 nucleotide sequences. The three GT43_1 wheat homeologues nucleotide (cDNA sequences) and amino acid sequences- TraesCS7A02G441400; TraesCS7B02G340100 and TraesCS7D02G430700 were obtained from IWGSC refseq1.1. The nucleotide sequence highlighted in green denotes the targeted sequence for the RNAi generated construct. Sequences from plants.ensembl.org.