

A

```

DTF1 AT1G15215 1 MAASDDSSHYFTEFTLSEIVDMENLYKELGDQSLHKDFCQTVASTFSCSVNRNGKSSITW
AT1G18380 1 MGRPPSNGGPAFRFRLPEVTEMBAILLOHNTAMPGRHILEALADKFSSESPERKQKVVVQF

DTF1 AT1G15215 61 KQVQIWFQEK---LKHSQPKSKTLPSPPLQIHDLSNPS----SYASNASNATFVGN---
AT1G18380 61 KQIWNWFQNRRYALRARGNKAPGKLNVSMPRMDLPNOMRSVIQPLSVPKTTHMTGNLPG

DTF1 AT1G15215 110 ---STFVQTRKQKASDLADLAFEAKSARDYAWYDVSSFLTMRVLRITGELVVRVRFSGFDN
AT1G18380 121 MTPAPSVPGVMRSGSDNSYLEFEAKSARDGAWYDVQAFLAHRNLEITGDPVQVRFAGFV

DTF1 AT1G15215 168 RHDEWVNVKTSVRRERSIPVEPSECGRVNVGDLILCFQEREDQALYCDGHVNLNIRKGIHDH
AT1G18380 181 EEDEWLNVKKHVRQRSLEPCBASECVAVLAGDLVLCFQEGKQALYFDALVLDQRRRHDV

DTF1 AT1G15215 228 ARCNCVFLVRYELDNTTEESLG-LERICRPEE-----
AT1G18380 241 RGCRCRFLVRYSHDQSEQLVPLRKKICRRPETDYRLQQLHNAVNDLANSNQHQIPALDAA

DTF1 AT1G15215 258 -----
AT1G18380 301 AKTPLSLPGATVPIVAPESKDPSSLATPATLVQPSSNAATVPAGSA

```

B

```

DTF1 AT1G15215 1 MAASD-DSHYFTEFTLSEIVDMENLYKELGDQSLHKDFCQTVASTFSCSVNRNGKSSIT
Vitis vinifera 1 ---MD-DAPVFLACFTQSEILEMENLFEEFGEETLQGFCDLATSFSSAPGCSGNMPVG
Zea mays 1 MGRPPESTTGAPAFRFLPSEVAEMEARLLQLNNGIPTRAMLQTLADKFSASPERAGKVAIQ
Picea sitchensis 1 MGRPPLSGAPVFRFSSSEVQEMEKVLEDTKGAIPNRDMIRSLAEKFSASPERDGLILVQ
Physcomitrella patens 1 MGRITP-MSGGTAERFLPAEVAEMKALDASNGATPARSIVETLADKFTNSSESSGQRVQ

DTF1 AT1G15215 60 WKQ-VQIWFQEKLKHSQPKSKTLPSPPLQIHDLSN-----PSSYASNASNATFVGN
Vitis vinifera 57 WKE-VRDWFQTKQKE-LVARVTSSPVAPRGIDALP-----EAPMNNAPQNSIVPRG
Zea mays 61 PKQ-VWNWFQNRRYSHRAKTRRVVSPPAKMTFSGADHHQHAANASAFRAAQPSVAVAH
Picea sitchensis 60 IKQ-VWNWFQNKRYSQKTKSTRVQG---NAAPSPRD-----DSVAKRAVTSAAVFP--
Physcomitrella patens 60 WKQ-VWNWFQNRRAQKAKIDKLVGVPGETPSAAK-----SVVIMLVTVRLCIVVDRV

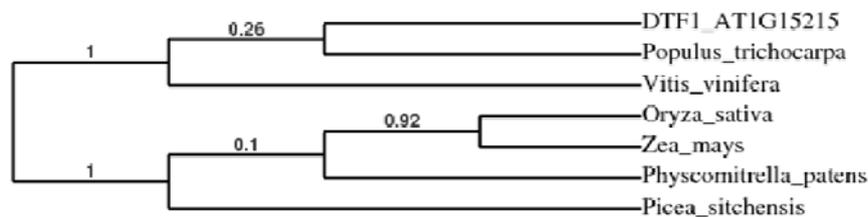
DTF1 AT1G15215 112 TFVQTRKQKASDLADLAFEAKSARDMAW--YDVSSFLTMRVLRITGELVVRVRFSGFDNRH
Vitis vinifera 107 DMV-----AADLSELTVEAKSSKDDAW--YDVAAPLTMRVLSGSELELRVRFSGFNEE
Zea mays 120 HGSSSTGKNPMEGVSVFEAKSARDGAW--YDVAAPLTMRVLSGSELELRVRFSGFCAEE
Picea sitchensis 106 -----SGRNVPLCAEMEFKSSRDGAW--YDVAAPLTMRVLSGSELELRVRFSGFCAEE
Physcomitrella patens 115 NVITGAARKPNVHVPMDFEAKSARDGAWYDVVSAFINKRTGNGEPEVRVRFAGGQSEE

DTF1 AT1G15215 170 DEWVNVKTSVRRERSIPVEPSECGRVNVGDLILCFQEREDQALYCDGHVNLNIRKGIHDHAR
Vitis vinifera 159 DEWVNVKTKLRKRSIPLEPSECGRVNVGDLVLCFQERSDQALYCDGHVNLNIRKGIHDHAR
Zea mays 178 DEWVNVKTKVRQRSLEPCATECVAVLPGDLILCFQEDKEQALYFDARVLDLQRRRHVVRG
Picea sitchensis 160 DEWVNVKTKVRQRSLEPCBSECVAVLPGDLILCFQEGKEQALYFDARVLDLQRRRHVVRG
Physcomitrella patens 175 DEWVNVATAVRQRSLEPCBTECVAVLPGDLILCFQEGSEQALYFDARVLDLQRRRHVVRG

DTF1 AT1G15215 230 CNCVFLVRYELDNTTEESLG-LEERICRPEE-----
Vitis vinifera 219 CRCIFVRYDHDHGE-EKVNLRKLCRRPTL-----
Zea mays 238 CRCRFLVRYDHDHSE-ELVPLRKKICRRPETDYRLQQLHHAARAAAADIHTPREAKVEL
Picea sitchensis 220 CRCRFLVRYDNDQSE-ELVPLRKKICRRPETDYRLKLVHAS-KELSSIELDQGSQQVKDAH
Physcomitrella patens 235 CRCRFVRYRHDQTEVEVPLRKKICRRPETEORLQQAREA-----

```

C



Supplementary information, Figure S1 Sequence analysis of DTF1. (A) Comparison of the DTF1 and DTF1-like protein sequences in *Arabidopsis*. (B) Alignment of the amino acid sequences of DTF1 and its orthologs in other plants. (C) The phylogenetic tree of DTF1 and its orthologs.