

ACAACAAC TACCCGCCCTTCCTCGCGCCGTTCCACGCGCAGCACCAGCCCGCCGCCTACGCCGCGTCCTCGGCCATG
CCGTACGGCGGCCAGCAGCAGCACGCGGGCGCGGGGCCCGCCGACATTGGCAGCTCGTACCACCACGGCCACGGCTA
CCACCAGCAGGGCCCGGGGAGTGCTCCATGCCGGTGGCCAGTGCCGCGGATCACGGCGCCAGCGGCCCGATGGACG
TGC GCGGCAGCAGCGGCCACGACTTCCTCTTCCCAGCGCCGACGACAAC TCCGGGTACCTGAGCAGCGTGGTGCCG
GAGAGCTGCC TCCGGCCCCGCGGCGGCGACCTGCAGGACGCGCGGCGCTACTCCGTGTCCGACGCCGACGCCTACGG
GCTGGGCCTCCGGGAGGACGTGGACGACCTGGCGACGATGGTGGCCGGCTTCTGGGGCGGCGCCGACGCGCCGTACG
GCGGCGGCCACGACATGGTGCCTCGTCGCAGGGCTCGGACAACGGCTACTCCCCCTCAGCTTCCTCTCCCACTGA

aacggacgcgctggcattgctccttagcctcttacgtactcagtggtctgctgtgcccaccgtcggccattagctagc
tactgtttgcttcgtgagttcgatcgatcgatcatagtagaagatcgtgaagaagagtggctttgttgtttcgggtgc
cctagcttagcggatgctcacatccatgtacttaggttctttcaattagcagcactattactacgtactactagtag
tagtaagttttcatgcatgcacgagtgacatgcttaagttatctctctctaaaattattacgcctctctctaatta
gttagtcgtgtggaattaaagtggcggatcgagagtactcgagaggcccgggaatgtagtacgcacacgcacactgt
tggtgatccttgaaagcttcagttttgggttgtagttttgtttgattcagataggccggcggaggaacatgtcaa
gtacgtactctcctacgtacttacctcaaggaagaagataaggggaatagtagacggaccacgtactagacgtagta
ctaccattgacagttcaacgaaaggtagatggtcaggacaagtgtcaagcaggcgacctccttttttttcttgg
gtcgcacaggtacttgggtgctgattctagggtagtcacgctcagagcctcagaccatccatcagatgatcagaggg
ccatgcacaaaatgtatcctcttctatgctggtgcagggttatataaaaccctttcatttccctccgtagcttgct
tggatttgttgatgggaaatgttcttattaatcaatagcaaaaaaggagaagataaaatgtgcatgtaaccatt
tgagtttattggacaatcaaaaaaattcagttttgccagatcgctatatagtgcttgacttgtaacaatatttcttat
gacataaatgagacatgtattaccatgcacaaaaagtatatcacacaaaagaacaagcaattgggttcaagtcctaa
ccttggcagcggatgctcgac

>*T. sinskajae* PI 418587

acttactcgtatggtcgtgctgagaacatcaccaacatagttggtgaagttattgcggttaatgttttagggaaga
caaaggggctttcattctagtttgacgtattgcgcgagcaggcacatggacacataagaaagcaaagccataggt
cagagtgtaaaaagcacataattatgtagcattttggcatgtatcataatagctagtgtagtactagtagtcttgg
gcatagattgcaattgtctctttcaaaacaaatagattacaattcttcaaaaggcttgatgcataggtaggtaagct
ctcttctttcccttcttttcttgtcagtgaggcatctttacaccatcttattagtttgcaatacttggtagctag
tagtaaatcatcaaagcatgcaaggcagtagtcccactaacatagatgccacaacaagctatgcatgtaggccc
taataattattaaagtggttcttggcaggggttcaatcggctctggttcagaaccagtggtcatatactcat
atgctggttgattaatttggagtggttagaatcatgacaaagataatcataatctgaaaacgacactaattaact
tatttgcaaggattgtggcatgcataatattcataaatgaattgtgtgcatgaaaactaagagtagaacattcttac
ttccaagtgttattttctagcaacacatacacacacananatataatagctatatgtttgactggcacaacattctct
catctctttggctcctaagattagggcacacaaaatccaacacaaggtgcatacacaacttgcagtgagctttcc
attccattccctccttttactcctagaattaaacaagtgagcgcagcatgcatgtccctcccctcctcccctacctcgc
catctcatccacagtgctctcactccttctagcttctccctcctccgagctcccatttaataaccaccctgcctcc
ctccatagtgagcactacacactagaagctcacagtctcagcaaccacctcctcaacctaagctagctagctcacac
ctcagagctcaagctagggcgggagcagtagtatagtagccagccaacctcacttacttctgccc

ATGAGCTCTCGCA
GCAGCAGCGGCGGGCGGGTGCCTCCCAGATGATGGCCTTCTCGGAGCATTGCTGCCGAAGCCGATCGCCGGTCA
CCGAGCCGAGCCGTCCCCGCGTCTGTCGCCGAGCGAGCGGGCGGGCGCGCGGCAGGCGGGCGCGCAGGAGCC
CGGGCGCTTCTGGGCGTGCGCCGGCGGCCGTGGGGCCGGTACGCGGCCGAGATACGCGACCCGACCACCAAGGAGC
GGCACTGGCTCGGCACATTGACACGCGCAGGAGGCCGCCCTGGCCTACGACCGCGCCGCGCTCTCCATGAAGGGC
GCGCAGGCGCGCACCAACTTCGTCTACGCGCACGCCCTACAACAAC TACCCGCCCTTCTCGCGCCGTTCCACGC

GCAGCACCAGCCC GCCCTACGCCGCGTCC TCGGCCATGCCGTACGGCGGCCAGCAGCAGCACGCGGGCGCGGGC
CGCCGACATTTGGCAGCTCGTACCACCACGGCCACGGCTACCACCAGCAGGGCCCCGGGCGAGTGCTCCATGCCGGT
CCCAGTGCCGCGGATCACGGCGCCAGCGGCCGATGGACGTGCGCGGCAGCAGCGGCCACGACTTCCTCTTCCCCAG
CGCCGACGACA ACTCCGGTACCTGAGCAGCGTGGTGCCGGAGAGCTGCCTCCGGCCCCGCGGCGGCACCTGCAGG
ACGCGCGGCGCTACTCCGTGTCGACGCCGACGCCTACGGGCTGGGCCTCCGGGAGGACGTGGACGACCTGGCGACG
ATGGTGGCCGGCTTCTGGGGCGGCGCCGACGCGCCGTACGGCGGCGGCCACGACATGGTCGCTCGTCGCAGGGCTC
GGACAACGGCTACTCCCCCTCAGCTTCCTCTCCC ACTGAaacggacgcgctggcattgctcttagcctcttacgta
ctcagtggctctgctgtgcccaccgtcggccattagctaggtactgtttg

>*T. durum* LD222

gcaggcatctttacaccatcttattagtttgcaatacttggtagctcagtagtaaatcatcaaagcatgcaaggcagt
atgcccaactaacatagatgccacaacaagctatgcatgtaggcccattaataattattaaagtgtttgtcttggca
ggggcttcaatcggctctggcttcagaaccagtgtgtcatatactcatatgctggttgattaatttgagtgggcta
gaatcatgacaaagataatcatatctgaaaacgacactaattaatacttatttgaaggattgtggcatgcataata
ttcataaatgaattgtgtgcatgaaaactaagagtagaacattcttacttccaagtgttatttttctagcaacacat
acacacacacatatatagctatatgtttgactggcacaacattctcctcatctctttggctcctaagattagggcaca
caaatccaaacacaaggtgcatacatacaaaacttgcatgagctttccattccattccctccttttactcctagaat
taacaagtgagcgcagcatgcatgtccctcccctcctcccctacctcgcctatctcatccacagtgtctcactcctc
tagcttctccctcctccgagctccccatttaaataaccacctgcctccctccatagtgcagcactacacactagaagc
tcacagtctcagcaaccacctcctcaacctaagctagctagctcacacctcagagctcaagctaggcgggagcagta
gtatagtagccagccaacctcacttacttctgc ATGAGCTCTCGCAGCAGCAGCGGCGGCGGGTGCCTCCCAG
ATGATGGCCTTCTCGGAGCATTCGCTGCCGAAGCCGATCGCCGGTACCCCGCAGCCGAGCCGTCCCCGCGTCGTC
GCCGAGCGAGCGGCCGGCGGCGCGGCAGGCGGCGCGCAGGAGCCCCGGGCGCTTCCTGGGCGTGCGCCGGCGGC
CGTGGGGCCGGTACGCGGCCGAGATACGCGACCCGACCACCAAGGAGCGGCACTGGCTCGGCACCTTCGACACGGCG
CAGGAGGCCGCCCTGGCCTACGACCGCGCCGCGCTCTCCATGAAGGGCGCGCAGGCGCGCACCAACTTCGTCTACGC
GCACGCCGCTACAACA ACTACCCGCCCTTCCTCGCGCGTTCACGCGCAGCACCAGCCCCGCCGCTACGCCGCGT
CCTCGGCCATGCCGTACGGCGGCCAGCAGCAGCAGCAGCGGGCGCGGGGCCCGCACATTTGGCAGCTCGTACCACCAC
GGCCACGGCTACCACCAGCAGGGCCCCGGGCGAGTGTTCATGCCGGTGCCTAGTGCCGCGGATCACGGCGCCAGCGG
CCCCGATGGACGTGCGCGGCAGCAGCGGCCACGACTTCCTCTTCCCCAGCGCCGACGACA ACTCCGGGTACCTGAGCA
CGGTGGTGCCGGAGAGCTGCCTCCGGCCCCGCGGCGGCGACCTGCAGGACGCGCGGCGCTACTCCGTGTCCGACGCC
GACGCCCTACGGGCTGGGCCTCCGGGAGGACGTGGACGACCTGGCGACGATGGTGGCCGGCTTCTGGGGCGGCGCCGA
CGCGCCGTACGGCGGCGGCCACGACATGGTCGCCTCGTCGCAGGGCTCGGACAACGGCTACTCCCCCTCAGCTTCC
TCTCCC ACTGAaacggacgcgctggcattgctcttagcctcttacgtactcagtggctctgctgtgcccaccgtcggc
cattagctaggtagtgtttgcttcgtgagttcgatcgatcgatcatagtagaagatcgtgaagaagagtggtttgt
tgtttcggtgccctagcttagcggatgctcacatccatgtacttaggttctttcaattagcagcactattactcgt
actactagtagtaagttttcatgcatgcacgagtgcacgtcttaagttatctctctctataaattattacagcct
ctctctaattagttagctgtgtggaattaaagtggcggatcgagagtactcgagaggccccgggaatgtagtacgcac
acgcacactgttgtgatccttgaaagcttcagttttgggtgtagttttgattgattcagataggccggccggagg
aacatgtcaaagtacgtactctcctacgtacttacctcaaggaagaagataagggaatagtacacggaccacgtac
tagacgtagtactaccattgacagttcaacggaaaggtagatgttcaggacaagtgtaagcaggcgacctccttt
ttttcttgggtcgccactcgccaggtacttggctgctgattctagggtagtcacgctcagagcctcagaccattc
atcagatgatcagagggccatgcacaaaatgtatcctctctatgctggtgcagggttatatataaacctttcat
ttctccgtagcttgcttgatgttggatgttggatgggaaatgctcttattaatcaatagcaaaaaaggagaagatataa

atgtgcatgtaaccatttgagtttattggacaatcaaacaaattcagttttgccagatcgctatatagtgtgact
tgtacaatattttcttatgacataaatgagacatgtattaccatgcacaaaaagtatatcacacaaaagaacaagcaa
ttgggttcaagtcctaaccttggcacggatgctcgcactttgctagatTTTTTTAAGGAACATTTTGCTAGATTTAT
tcaagacattccgacgatatttattcagtaggagagatgttcacatcgacagagaggtgctgttgggttctccgttgcg
tcagatatggggggttccccctttctcctgctgcctctgtcgtcgttccgggtgggttgcggtgcaggctccgggtgg
ggtgagccctggtggtgtactttgggtctgggggaaccctggccagtctggccggccccggcgggcgatgcccat
gggcgcccgc

>*T. turgidum* K-40750

atacttgggtactcagtagtaaatcatcaaagcatgcaaggcagtagtcccaactaacatagatgccacaacaagcta
tgcattgtagggccattaataattattaaagtgtttgtccttggcaggggttcaatcggctctggcttcagaaccagt
gtgtcatatactcatatgctggttgattaatttggagtgggctagaatcatgacaaagataatcataatctgaaaacg
aactaattaatacttatttgaaggattgtggcatgcataatattcataaatgaattgtgtgcatgaaaactaaga
gtagaacattcttacttccaagtgttatttttctagcaacacatacacacacacatatatagctatatgtttgactg
gcacaacattctcctcatctctttgtcctaagattagggcacacaaatccaacacaaggtgcatacatacaact
tgcagtgcagctttccattccattccctcctttactcctagaattaacaaagtgcagcgcagatgcagtcctcctccct
cctccccctacctcgccatctcatccacagtgtctcactccttctagcttctcctcctccgagctccccatttaa
taccacctgcctccctccatagtgagcactacacactagaagctcacagtctcagcaaccacctcctcaacctaa
ctagctagctcacacctcagagctcaagctaggcgaggagcagtagtatagtagccagccaacctcacttcacttctg
ccATGAGCTCTCGCAGCAGCAGCGGCGGGCGGGTGCCTCCCAGATGATGGCCTTCTCGGAGCATTGCTGCCGAAG
CCGATCGCCGGTCAACCGCAGCCGAGCCGTCCCCGCCGTGCTCGCCGAGCGAGCGGGCCGGCGGGCGGGCAGGCG
GCGCGCGCAGGAGCCCGGGCGCTTCCGTTGGCGTGCGCCGGCGGCCGTGGGGCCGGTACGCGGCCGAGATACGCGACC
CGACCACCAAGGAGCGGCACTGGCTCGGCACCTTCGACACGGCGCAGGAGGCCGCCCGGCCTACGACCGCGCCGCG
CTCTCCATGAAGGGCGCGCAGGCGCGCACCAACTTCGTCTACGCGCACGCCGCCTACAACAACCTACCCGCCCTTCCT
CGCGCCGTTCACGCGCAGCACCAGCCCGCCGCTACGCCGCGTCCGCGCCATGCCGTACGGCGGCCAGCAGCAGC
ACGCGGGCGCGGGGCCCGCCACATTGGCAGCTCGTACCACCACGGCCACGGCTACCACCAGCAGGGCCCGGGCGAG
TGTTCATGCCGGTGCCAGTGCCGCGGATCACGGCGCCAGCGGCCGATGGACGTGCGCGGCAGCAGCGGCCACGA
CTTCTCTTCCCCAGCGCCGACGACAACCTCCGGGTACCTGAGCAGCGTGGTGCCGGAGAGCTGCCTCCGGCCCCGCG
GCGCGACCTGCAGGACGCGCGGGCTACTCCGTGTCCGACGCCGACGCCTACGGGTGGGGCTCCGGGAGGACGTG
GACGACCTGGCGACGATGGTGGCCGGCTTCTGGGGCGGGCCGACGCGCCGTACGGCGGGCGGCCACGACATGGTCG
CTCGTCGAGGGCTCGGACAACGGCTACTCCCCCTCAGCTTCCTCTCCCACTGAaacggagcgcgctggcattgctc
ttagcctcttaoactcagtggtctgtgtgcccaccgtcggccattagc

>*T. durum* R107

tacttactcgtatgttcgtgtcgagaacatcaccaacatagtttgggtgaagttattgcggttaatgttttagggaag
acaaaaggggctttcattctagtttgacgtattgcgagcagggcacatggacacataagaaagcaaagccatag
gtcagagtgtaaaaagcacataattatgtagcattttggcatgtatcataatagctagtgtagtactagtatcttg
gagcatagattgcaattgtctctttcaaacaataagattacaattcttcaaaggcttgatgcataggtaggttag
ctctcttctttcccttcttttcttgtcagtggtcaggtcctttacaccatcttattagtttgaatacttgggtactc
agtagtaaatcatcaaagcatgcaaggcagtagtcccaactaacatagatgccacaacaagctatgcatgtagggcc
attaataattattaaagtgtttgtccttggcaggggttcaatcggctctggcttcagaaccagtgtgtcatatactc
atatgctggttgattaatttggagtgggctagaatcatgacaaagataatcataatctgaaaacgacactaattaata
cttatttgaaggattgtggcatgcataatattcataaatgaattgtgtgcatgaaaactaagagtagaacattctt
acttccaagtgttatttttctagcaacacatacacacacacatatatagctatatgtttgactggcacaacattctc

ctcatctctttggtcctaagattagggcacacaaaatccaaacacaaggtgcatacatatacaaacttgacgtgagcttt
ccattccattccctccttttactcctagaattaaacaagtgcagcgcacatgcatgtccctcccctcctcccctacctc
gccatctcatccacagtgtctcactccttctagcttctccctcctccgagctccccatttaataaccaccctgct
ccctccatagtgcactacacactagaagctcacagtctcagcaaccacctcctcaacctaagctagctagctcac
acctcagagctcaagctaggcgggagcagtagtatagtagccagccaacctcacttcacttctgcc**ATGAGCTCTCG**
CAGCAGCAGCGGGCGGGCGGTGCCCTCCCAGATGATGGCCTTCTCGGAGCATTGCTGCCGAAGCCGATCGCCGGTC
ACCCGCAGCCGCAGCCGTCCCCGCCGTCGTCGCCGAGCGAGCGGGCGGGCGCGCGGCAGGCGGGCGCGCAGGAG
CCCGGGCGCTTCTGGGCGTGGCCGGCGGGCGGTGGGGCCGGTACGGGGCCGAGATACGGGACCCGACCACCAAGGA
GCGGCACTGGCTCGGCACCTTCGACACGGGCGCAGGAGGGCCGCCCGGGCTACGACCGCGCCGCGCTCTCCATGAAGG
GCGCGCAGGCGCGCACCAACTTCGTCTACGCGCACGCCCTACAACAACACCCGCCCTTCTCGCGCCGTTCCAC
GCGCAGCACCAGCCCGCCGCTACGCCGCGTCTCGGCCATGCCGTACGGCGGCCAGCAGCAGCACGCGGGCGCGGG
GCCGCCGACATTGGCAGCTCGTACCACCACGGCCACGGCTACCACCAGCAGGGCCCGGGCGAGTGTTCATGCCG
TGCCCAGTGCCGCGGATCACGGCGCCAGCGGCCCGATGGACGTGCGCGGCAGCAGCGGCCACGACTTCTCTTCCCG
AGCGCCGACGACAACCTCCGGGTACCTGAGCAGCGTGGTGCCTGGAGAGCTGCCCTCCGGCCCCGGCGGGCGGACCTGCA
GGACGGCGGGCGCTACTCCGTGTCCGACGCCGACGCCCTACGGGCTGGGGCTCCGGGAGGACGTGGACGACCTGGCGA
CGATGGTGGCCGGCTTCTGGGGCGGGCGCCGACGCGCCGTACGGCGGGCCACGACATGGTTCGCTCGTCCAGGGC
TCGGACAACGGCTACTCCCCCTCAGCTTCTCTCCACTGAaacggacgcgctggcattgctcttagcctcttacg
tactcagtggtctgctgtgcccaccgtcggccattagctaggtagtggttgcttctgtagttcgatcgatcgatcat
agtagaagatcgtagaagaagagtggctttgtgtttcggtgccctagcttagcggatgctcacatccatgtacttag
gttctttcaattagcagcactattactacgtactactagtagtaagttttcatgcatgcacgagtgcacatgctt
aagttatctctctctaaaattattacagcctctctctaattagttagctggtggaattaaagtggcggatcgagag
tactcgagaggcccgggaatgtagtacgcacacgcacactgttgttgatccttgaagcttcagttttgggtttag
ttttgtttgattcagatagggccgcccggaggaaatgtcaaagtacgtactctcctacgtacttacctcaaggaaga
agataagggaatagtacacggaccacgtactagacgttagtactaccattgacagttcaacggaaaggtagatggt
caggacaagtgtcaagcaggcgacctcctttttttcttgggtcgccactcgccaggctacttgggtgctgattctagg
gtacgtcacgctcagagcctcagaccattcatcagatgatcagagggccatgcacaaaatgtatcctcttctatgc
tgggtcagggcttatataataaacctttcatttcctccgtagcttgcttgattgttggatgggaaatggtcttat
taatcaatagcaaaaaaggagaagatataaatgtgcatgtaaccattgagtttattggacaatcaacaaattca
gttttgccagatcgctatatagtgcttgacttgtaacaatatttcttatgacataaatgagacatgtattaccatgca
caaaaagtatatcacacaaaagaacaagcaattgggttcaagtcctaacttggcagggatgctcgcactttgctag
atTTTTTTAAGGAACATTTTGTAGATTTATTCAAGACATTCGACGATTTTATTTCAGTAGGAGAGATGTTACAT
cgacagagaggtgcgttggttctccgttgctcagatatggggggttcccccttctcctgctgcctctgtcgtcgtt
ccggtggtttgcggtgcaggctccggtggtgtagccctggtggtgactttgggtttggggggaaccctggcca
gtctggccggcccggcggcgatgccatgggcgcttcat