

IDENTIFICATION

Species: *Brachypodium distachyon*

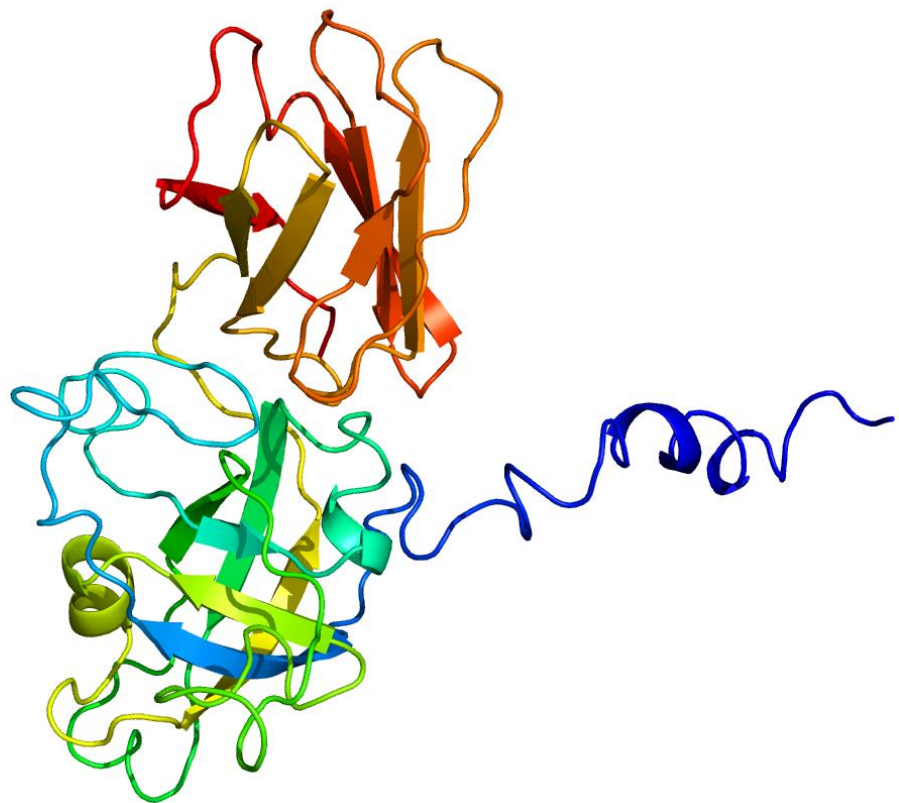
Locus: Bradi1g35830

Gene Model: Bradi1g35830.1.p

Description: BdEXPA-02

Family: Alpha Expansin

3D structure:



GENOME DATABASES

Phytozome: https://phytozome-next.jgi.doe.gov/info/Bdistachyon_v3_1

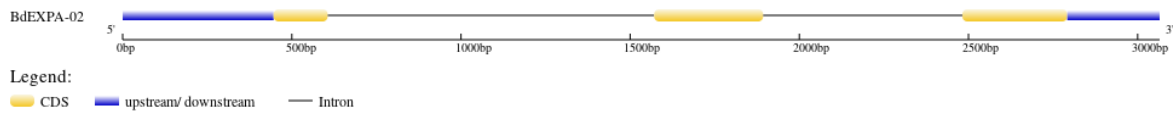
KEGG: <https://www.genome.jp/entry/T01717>

EXTERNAL RESOURCES

<https://brachypodium.org/>

https://archive.gramene.org/species/brachypodium/brachypodium_intro.html

GENE STRUCTURE



DOMAIN ARCHITECTURE



SEQUENCES

Peptide

>BdEXPA-02

MMGSLPLLFFLLLLLISGVRFGGSVRLGNGGYEEWRLGTATYIKESQGHPLNDGGGA
CGYGDLDIFRYGRYTTGLSSALFGRGSACGACYELRCVNNILWCLRGSPVVVTATD
FCAPNFGLPDDFGGWCNFPREHLEMTEAAFLRVAKAKADIVQVQFRRVSCDRAGGM
RFTITGGASFLQVLITNVAADGEVIALKVKGSRTGWIPMGRNWWGQNWQCNA DLQRQ
PLSFEVTGKKGRTFTMYNVAPSDWMFAQTFEGKQLVE*

CDS (coding sequence)

>BdEXPA-02

ATGATGGGCTCTCTGCCCTTCTCTTCTTCTTGCTGCTGCTGCTGATTTCTGGAGTC
AGGTTTCGGCGGCAGCGTAAGGCTGGGCAATGGCGGCTACGAGGAGTGGAGGCTG
GGCACGGCGACCTACATCAAGGAGTCCCAGGGGCACCCGCTCAATGATGGTGGT
GGTGCCTGCGGATATGGGGACCTGGACATATTCAGATACGGGAGGTACACGACC
GGCCTGAGCAGCGCGCTGTTTGGGCGTGGCAGCGCCTGCGGCGCCTGCTACGAGC
TCCGGTGCCTGAACAACATCCTCTGGTGCCTGCGGGGCAGCCCGACCGTCGTCGT
GACGGCGACCGACTTCTGCGCCCCAACTTCGGCCTCCCTGACGACTTTGGTGGC
TGGTGCAACTTCCCCAGGGAGCACCTAGAGATGACCGAGGCCGCTTCCCTCCGGG
TTGCCAAGGCCAAGGCTGACATTGTCCAGGTGCAGTTCGAAGGGTGAGCTGCGA
CAGAGCCGGTGGCATGCGGTTACGATCACCGGCGGTGCCAGCTTCCCTCCAGGTC
CTGATACCAACGTGGCGGCCGACGGCGAGGTCATCGCCTTGAAAGTGAAAGGG
TCAAGAACCGGGTGGATAACCAATGGGGAGGAACTGGGGGCAGAACTGGCAGTGC
AACGCCGATCTCCAGCGCCAGCCGCTTTCGTTTCGAGGTC ACTGGAAAGAAGGGG
AGGACCTTCAGATGTACAACGTGGCACCTTCAGATTGGATGTTTCGCGCAAACAT
TTGAAGGCAAGCAGCTCGTTGAATAG

Nucleotide

>BdEXPA-02

GACTTGTA AAAATTTCTGAAAAGTGTCAAGTCCCTGCCTTTGAGAAGGTGGAACCG
TGGCAGTCGGAAGAGAAGACAATTGTTACAGGTCCCTCGAAAGGAAAAGCCGCC
CGTCGCCGCGGTCCGAGCTGCTGCCACTACTGCAAATCCCAATAAAGTGAGCAGA
AAGGGCGTGGCACCAATGCAGGCTCGCGTTATACTCCCACTGTCCTCCTCATCT

TTGACTCCCTCGCCATCCCAGTCCAAGCCAAACGCAGACCAACAAAGAACTGCTG
CCCATTCCAGGAGCCCAAGAACTCGCTTGCCAAGAACAGCAACTACTCAAGAC
CCATCCCCCTCCTCCCCAAGTCCTCTGCAGCCGCAAGCACTCAAACACTTCAAC
CAAGAGATTGCACTGGCCAGTGGAGTGAATCAGGTGAACAGTGATCACCTGGTA
CAGAGCAACATGATGGGCTCTCTGCCCTTCTCTTCTTCTTGCTGCTGCTGAT
TTCTGGAGTCAGGTTGCGCGGCAGCGTAAGGCTGGGCAATGGCGGCTACGAGGA
GTGGAGGCTGGGCACGGCGACCTACATCAAGGAGTCCCAGGGGCACCCGCTCAA
TGATGGTATGCGGCTATGTGATCTTATTAAGTCATTTTTCTTGTTAATCGTCGCA
TCAAGAACGTTGGGAACGTCCGGCCTTTCTCTCTTTTTTTGTCCCCTTCCCCCTT
CTTTCTGCATTTTCTCTGGATGGAGTTTGGAGATGGCGAATGTTGTTTGCAAGGAT
GAATGGGAGTACATGGTGTGTATTAGGCAGATCCGGCGTCGTTTGTCTCATGTAT
TCGCTACTGAGAAAGTTGCAATAGAAAAAGATTCGCTGTTGAAACTTGTTCCTT
TCACTTATTTAGATGGATTTTACTCTTTTACTGAACATTCCTTGTATATTCTGCT
GTAGATGATAGGAGTATTTTATTGTGATCTGTGAAAGGGTAGAAAAGAAAAGGG
GTATATTTAAAATGATTGTAATGCTAATGCTATCCTTACAATCATTCCATCAATA
GTTTCTTTATGATACTTTGAGTAATCTTTTTTGGAGGTGTTAGTGCACCAAATGTTG
CCTTGGTCCGGATAAACTAGTGCTGTCCTAATCAGCCGAAAGAAAAGAAAGAAC
GCCCTTTGCGTAAGTTGTGGGAATAGTAAGGACACATTGAATGCTTTGACAATCC
AATTTATGAGAGGCAAGCTAGTACAACATGAGCTCTTCTTGCTGTCACTGCCTGT
ACACTCAAGCTATGCAGTGTACCTTCACAGTCATTGCTCCATTGAAAATCTGAAA
GACTGTTTTTTTTTTACCTTCTGATTTCCGAAGAACCATCAAATGGACTCTGAA
TTCTGGAGATCGTATGCCCTTTTGCCTAGTTTCTTCAACGAATGCCGTTTACATCC
ACCTCTGAACCTGAATTTAGAGACACCCATATTTACATTGTGAGATCAACAATGT
AAATCCTTTCTATGTTTCATGTGACTTGGAAATGGAAATGTCCTTTGTCTGATGCAA
TGGTTGTTTCAAACCTCCGAATCAAAGGTGGTGGTGCCTGCGGATATGGGGACCTG
GACATATTCAGATACGGGAGGTACACGACCGGCCTGAGCAGCGCGCTGTTTGGG
CGTGGCAGCGCCTGCGGCGCCTGCTACGAGCTCCGGTGCCTGAACAACATCCTCT
GGTGCCTGCGGGGCAGCCCGACCGTCGTGTCGTGACGGCGACCGACTTCTGCGCCCC
AAACTTCGGCCTCCCTGACGACTTTGGTGGCTGGTGCAACTTCCCCAGGGAGCAC
CTAGAGATGACCGAGGCCGCTTCCCTCCGGGTTGCCAAGGCCAAGGCTGACATTG
TCCAGGTGCAGTTCGAAGGTAAGCGTCACTTGCAATTTTTTTTCATGTTCTCAAT
TTGCTCAAATGGTGAACTTCTGATATATCCTTTAGCTTATCATTGATTCTGCAAC
TTGTGATGTGTGTGGGTTTGTGTGAAAGTACGGCACTATCATTCTTGAGCTGTGA
TGTTGTGTAGTACGGAGTAGTTTTTTTTGCCTGTCTTTGCAAAAGTTGGGAATGATG
TTTGATGATGATTAGAAACGGATCATAGAATATGTAGAACATGTTGCAAGCTACT
TTGCATTGTGGGCTATTGGGTGGGAAAAGAATTATGTTGATGAGAGGGTTCTGAG
CAAAGAGCAGCTTTAATCAGTAACACTTTCTTCTTTTTGAATCTGACTCGTGTATT
TTAATCATGAGTATTTCCCAAGTTTCAGACAAATGCTATGAGTATGTCCCACCG
GTGCATGAGTAGTAAACAACAAGTATCCTTCATACTACAATAACATATGATTAAG
TACTGACATATATTCATTTCTGCCAAAGAAGCTATCCCCTTTCGTCAGAACCAT
GCATAAATCAGCAGAATTTCTTTGAGGATTTGAGTAGCCACTGATGATGCAGGGT
GAGCTGCGACAGAGCCGGTGGCATGCGGTTACAGATCACCGGCGGTGCCAGCTTC
CTCCAGGTCTGATACCAACGTGGCGGCCGACGGCGAGGTATCGCCTTGAAAG
TGAAAGGGTCAAGAACCGGGTGGATACCAATGGGGAGGAACTGGGGGCAGA
GGCAGTGCAACGCCGATCTCCAGCGCCAGCCGCTTTCGTTTCGAGGTCACTGGAAA
GAAGGGGAGGACCTTCAGATGTACAACGTGGCACCTTCAGATTGGATGTTCCGCG
CAAACATTTGAAGGCAAGCAGCTCGTTGAATAGGTGAAAAGAGTGGTAAGCTCC

GGTGATTGTAATTAGAATTACAGGGGGGGTTTATAAATGTCGGGCTTCAATTTG
TGACCTAAAAGAATTTAGCCTCACTGAATGGTGTGCTCTGCTCACCTGTTCGG
TATAGTTATTAATTTTACTTCCGGTTGTTTCTGGTACTCCCTGGCCAGGACAAT
GGTTTGTGTTGCATGTTGCAAGCCGAGGTTGACCCAACGCATTCCTTGCCTAAGC
ATGAAATCGCATTTAAAAGTGGAGAGCAAA