

IDENTIFICATION

Species: *Solanum tuberosum*

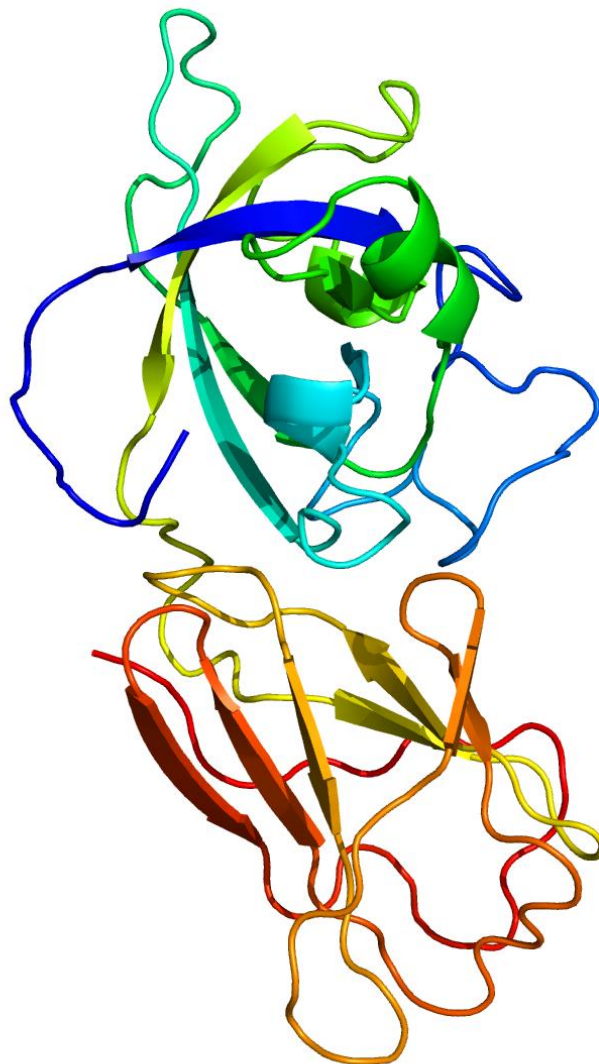
Locus: PGSC0003DMP400011588

Gene Model: PGSC0003DMP400011588

Description: StEXPA-01

Family: Alpha Expansin

3D structure:



GENOME DATABASES

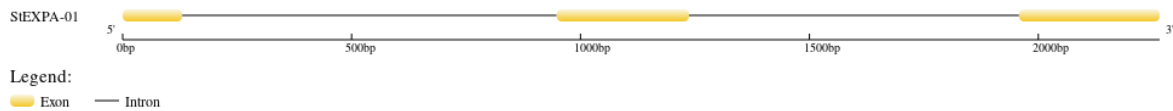
Phytozome: https://phytozome-next.jgi.doe.gov/info/Stuberosum_v4_03

KEGG: <https://www.genome.jp/entry/T02981>

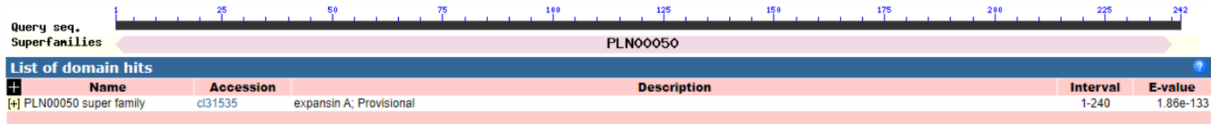
EXTERNAL RESOURCES

<http://spuddb.uga.edu/>

GENE STRUCTURE



DOMAIN ARCHITECTURE



SEQUENCES

Peptide

>StEXPA-01

MAHIVIFLVCFLAIASFVKGYGKGKWINAHATFYGGGDASGTMGGACGYGNLYNQG
YGTKTAALSTALFNGLSCGSCYEIKCVNEHKWCLSGSIKVTATNLCPGGWCNPL
HHFDLSQPIFQHIAQYRAGIVPIAYRRIPCRRKGGIRFTINGHSYFNLVLVTNVGGAGD
VHAVAIGSKTQWQSMSRNWQNWQSNLLNGQSLSFKVTTSDGHSVVSKNVAPA
SWSFGQTYTGGQFH*

CDS (coding sequence)

>StEXPA-01

ATGGCTCATATTGTGATATTTCTAGTTTGTTCCTTGCAATTGCCTCATTTGTCAAG
GGATATGGTAAAGGAAAGTGGATCAATGCTCATGCTACATTCTATGGAGGTGGTG
ATGCCTCAGGACAATGGGTGGTGCTTGTGGTTATGGGAATCTATAACAACCAAG
TTATGGAACAAAACACTGCAGCTTTAAGCACAGCTTTATTCAACAATGGATTGAGT
TGTGGATCTTGCTATGAGATTAATGTGTGAATGAACATAAATGGTGTTCGTCAG
GTTCTATTAAGTAACAGCAACCAATTTATGTCCACCTGGTGGCTGGTGCAATCC
TCCTCTCACCCTTTGACCTTCTCAGCCTATTTTCAGCACATTGCCCAATATAG
AGCTGGAATTGTCCCTATTGCTTATAGAAGGATACCCTGCAGAAGAAAGGGAGG
CATCAGGTTCACAATCAATGGACACTCTTACTTCAACTTAGTACTTGTGACTAACG
TTGGCGGTGCTGGTGTGATGTTTCATGCTGTAGCCATTAAGGATCGAAAACACAATG
GCAATCTATGTCAAGAAATTGGGGCCAAAACACTGGCAAAGCAACAGTTTACTAAA
TGGACAAAGCCTTTCAATTAAGTTACTACTAGTGATGGACATAGTGTAGTCTCT
AAGAATGTTGCCCTGCTAGTTGGTCTTTTGGGCAGACATACACTGGTGGACAGT
TTCATTGA

Nucleotide

>StEXPA-01

ATGGCTCATATTGTGATATTTCTAGTTTGTTCCTTGCAATTGCCTCATTTGTCAAG
GGATATGGTAAAGGAAAGTGGATCAATGCTCATGCTACATTCTATGGAGGTGGTG
ATGCCTCAGGACAATGGGTATGCAAACCTAATTGGTAGTTCTCTAGTTCATAT
CAAGGTCACAATCGATATCGTCACTAGTATTTGAGTTGTAACATCATCAATAAC
ATCATTATACCAAATCTTTAGGTTTGTATCATTGAACTTGTTCAGGAATACTA
TAATGAATGGAATATAGAGTTTGTAGCTAGGAACTTGTATAGGAATACTATAAAG

AAAGGAAAATGTCAGAGTTCGTTACTAGGTGTTTGACCAAATAGGATCGTAATGT
TCCTGAATAATCTATCACTAAAATATCCCTCGTAGGTATAAGGCTAATCGGAGGG
AAAAGAGTTTTGCATCATATAGAAAATATATCGGTGAATTCAGAATCTAGAGTTA
GTGAATTTTCAAAAACAAAAAAGAGTATGATCTCATTACATTTATTTATTTTA
ATTGATTTTTGCACATATATTACACAATTTAAGAGAAAATCAAGGGTTCAATTGA
ACTCATATAACTCCCCATAATTTTGTCTTTGTTTATGTTGGTTCTTAGTTTTGGCTA
GGTAAGCTTGCTCACATTGTCTGTCTCAAGCCTGTATAGACAAGGAGAGTTCCGG
TTTCAAGAATGACTATGACTTTGTCATAGTCATACTTTTAATTGATTTTTGCATAT
ATATTACATAGCTCGCGGCAAACCTCAAAGGGTGCAATCGAAATCATAGAACTCAC
AATAAATTAATTCTTGTAATTCGGCTTGTGTGAGGTTGCTCACATTGCCGACCTA
AGTTCTAACAATCAATAATGTTGATTTGTGTGGAACTTTATTTACATTTATTTTCA
AACAGGTGGTGCTTGTGGTTATGGGAATCTATAACAACCAAGGTTATGGAACAAAA
ACTGCAGCTTTAAGCACAGCTTTATTCAACAATGGATTGAGTTGTGGATCTTGCTA
TGAGATTAATGTGTGAATGAACATAAATGGTGTTTGTCAGGTTCTATTAAGTA
ACAGCAACCAATTTATGTCCACCTGGTGGCTGGTGCAATCCTCCTCTTACCACCTT
TGACCTTCTCAGCCTATTTTTCAGCACATTGCCCAATATAGAGCTGGAATTGTCC
CTATTGCTTATAGAAGGTATGTTCAATGGTTTTATCATAACATTCGAAACTATCTAT
AATAACGTCATTTGTTTGGATAGATTTTGGCTGCTATAGTGAAATGTTGTGATCAA
TAACATATAGTATAAATAACATGAAAAATTGATTCTAAAAGAATTGGTCATTAT
ACTGAAATATTGTTATAGAAAGGTTTACTGTATTTGGTTCAAATAATGCTTGATT
ATGTGATTTTCTTCGAAACTTCATGTTGATGCTCGTTACATGCGTGAAACACACG
GACTTTAATCAACTCGGTGCTCAAGTTGCCACATAGGTTTCAAGTCAATGATCAGAG
TCGTTAATTAGTCCACCAGATATTGCCTACGTCCTACCTGGCAGGGCTGAGAGGG
TTCATCTGAATCTCCTTAAGAGAAAAATTTCAATTGTTTATATATGGTTAAAGTTAA
TTTTTTGTGTATATATAGTAGATGTTGAACCCCTTTTGGCTTCTTTGTCTGTTACT
TCATATTCTGAATCTCTTTAATGAAAATCCTCGCTCAGACACTGCTACTAGTATAG
GTACTCTGTTACCAAAAACCTTAGAAGATACAAAAGAATCACCTAACACTTTTTGC
CTTTTATTGGAATTTAAACTCTTCTTTTCTCGCGATTCATTTTAGCTTCATTAACCG
TTAGGTCACACCTATAAATGCCTTCAACAGAATCAACTAACATAAACTCTATTGT
CAACTCTTGCAGGATACCCTGCAGAAGAAAGGGAGGCATCAGGTTACAATCAA
TGGACACTCTTACTTCAACTTAGTACTTGTGACTAACGTTGGCGGTGCTGGTGATG
TTCATGCTGTAGCCATTAAAGGATCGAAAACACAATGGCAATCTATGTCAAGAAA
TTGGGGCCAAAACCTGGCAAAGCAACAGTTTACTAAATGGACAAAGCCTTTTCAATTT
AAAGTTACTACTAGTGATGGACATAGTGTAGTCTCTAAGAATGTTGCCCTGCTA
GTTGGTCTTTTGGGCAGACATACTGGTGGACAGTTTCATTGA