

IDENTIFICATION

Species: *Manihot esculenta*

Locus: Manes.05G143800

Gene Model: Manes.05G143800.1

Description: MsEXPA-14

Family: Alpha Expansin

3D structure:



GENOME DATABASES

Phytozome: https://phytozome-next.jgi.doe.gov/info/Mesculenta_v7_1

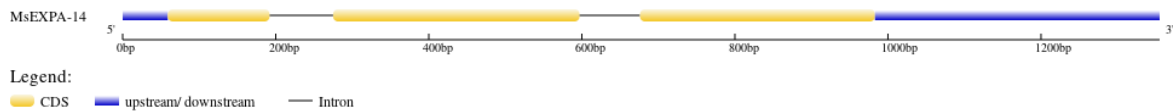
KEGG: <https://www.genome.jp/entry/T05761>

EXTERNAL RESOURCES

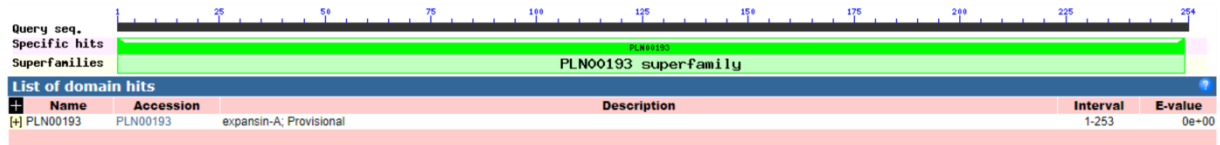
<https://cassavagenome.org/>

<https://cassavabase.org/>

GENE STRUCTURE



DOMAIN ARCHITECTURE



SEQUENCES

Peptide

>MsEXPA-14

MAKLVLSPILLCFLAINVA AFTPSGWTKGHATFYGGSDASGTMGGACGYGNLYAT
GYGTRTAALSTALFNDGASCQCCKIICDYQADPRWCIKGRSVTITATNFCPPNFALP
NNGGWCNPPQLQHFDMAQPAWEKIGIYRGGIVPVLVQFQRPCKKHGGVRFVTVNGRDY
FELVLISNVAGAGSIQAVDIKGSKTGWMSMSRNWGANWQSNAYLNGQSLSFRVTTT
DGETRLFPDIVPANWAFGQSFSSPVQF*

CDS (coding sequence)

>MsEXPA-14

ATGGCAAAGCTGGTCCTTTCATTGCCAATCTTGCTCTGTTTCTTAGCCATTAACGT
TGCTGCCTTCACTCCTTCTGGGTGGACCAAGGCCATGCAACCTTTTATGGAGGA
AGTGATGCTTCAGGAACCATGGGTGGAGCTTGTGGATATGGTAACTTGTATGCAA
CTGGGTATGGAACCAGAACTGCTGCTTTAAGCACTGCTTTATTCAACGATGGAGC
TTCTTGTGGACAGTGCTACAAGATCATATGTGATTATCAAGCTGATCCCAGATGG
TGTATTAAGGCAGATCTGTGACGATTACTGCAACAAATTTCTGCCACCTAATTT
TGCTCTCCCAAACAACAATGGAGGCTGGTGAATCCTCCCCTCAGCATTTCGAC
ATGGCTCAGCCAGCTTGGGAAAAAATTGGCATTACAGAGGAGGGATCGTCCCTG
TTTTGTTCCAAGGGTTCATGCAAGAAACATGGCGGAGTTAGATTACCGTCAA
TGGAAGAGATTACTTCGAGCTTGTGTTGATAAGCAATGTGGCAGGGGCTGGATCA
ATTCAGGCTGTGGATATTAAGGCTCAAAAACAGGGTGGATGTCAATGTCAAGA
AACTGGGGAGCTAATTGGCAGTCTAACGCATATCTCAATGGGCAATCTTTGTCTT
TTAGGGTCACA ACTACTGATGGGGAGACCAGATTGTTCCAGACATTGTTCCAGC
CAATTGGGCATTTGGGCAGAGTTTTTCAAGCCCAGTACAATTTAA

Nucleotide

>MsEXPA-14

ACATCTCCAATATTCACCTTCCATTCTCCATTGTCTTACATTCATCTTGCTGAGA
AAAATGGCAAAGCTGGTCCTTTCATTGCCAATCTTGCTCTGTTTCTTAGCCATTAA
CGTTGCTGCCTTCACTCCTTCTGGGTGGACCAAGGCCATGCAACCTTTTATGGAG
GAAGTGATGCTTCAGGAACCATGGGTATGCAGCAATCCACTTGAATTTTTCTGG
GTTCTTACAGTTTCAGGGAATGATTAAGCTAACATGATTGTTGGCTGCAGGTG
GAGCTTGTGGATATGGTAACTTGTATGCAACTGGGTATGGAACCAGAACTGCTGC
TTTAAGCACTGCTTTATTCAACGATGGAGCTTCTTGTGGACAGTGCTACAAGATC

ATATGTGATTATCAAGCTGATCCCAGATGGTGTATTAAAGGCAGATCTGTGACGA
TTACTGCAACAAATTTCTGCCACCTAATTTTGCTCTCCCAAACAACAATGGAGG
CTGGTGCAATCCTCCCCTCCAGCATTTCGACATGGCTCAGCCAGCTTGGGAAAA
ATTGGCATTACAGAGGAGGGATCGTCCCTGTTTTGTTCCAAAGGTACCAACTTTT
TCTTCTTTTCAACTATTTTCATGCATGACAAATGAGCAAATCTAATGCTGTGGAGCT
TATCTGTGCAGGGTTCCATGCAAGAAACATGGCGGAGTTAGATTCACCGTCAATG
GAAGAGATTACTTCGAGCTTGTGTTGATAAGCAATGTGGCAGGGGCTGGATCAAT
TCAGGCTGTGGATATTAAAGGCTCAAAAACAGGGTGGATGTCAATGTCAAGAAA
CTGGGGAGCTAATTGGCAGTCTAACGCATATCTCAATGGGCAATCTTTGTCTTTTA
GGGTCACAACACTACTGATGGGGAGACCAGATTGTTCCCAGACATTGTTCCAGCCAA
TTGGGCATTTGGGCAGAGTTTTTCAAGCCCAGTACAATTTTAAAATCAAATCATC
AGAAGCTTTGGAGTTCAGGGTTTGATTTGGCAGAGGCGTGCTTATAATTTTACTA
GAGCAGCCC GCCAGTTTTGTTTTCTGTTTCTCAATTCAGCTCTGGCTCTGGAGCAAT
CAATGAGCCATGAACTCTAAGGCTACTGCTCTGCTAAGCTTTTGTGCCTTTCAAAA
CCCAGAAAGTGCAGAGCTTGATACACAATATTTGGTGAGAATTTTCGGAGTTTGC
TGCAGAATAAGAAGCGCAATGAAATTGCTGCTTAAGCATTCTTAGAATTGATTTT
CATTAGCTTTGTAATATGATTATTATTATTATATTGTTTAAAAAAAATCTACCCTT
TATGTGCTTGTA AAAATGAATGGTTGTT