

## IDENTIFICATION

**Species:** *Manihot esculenta*

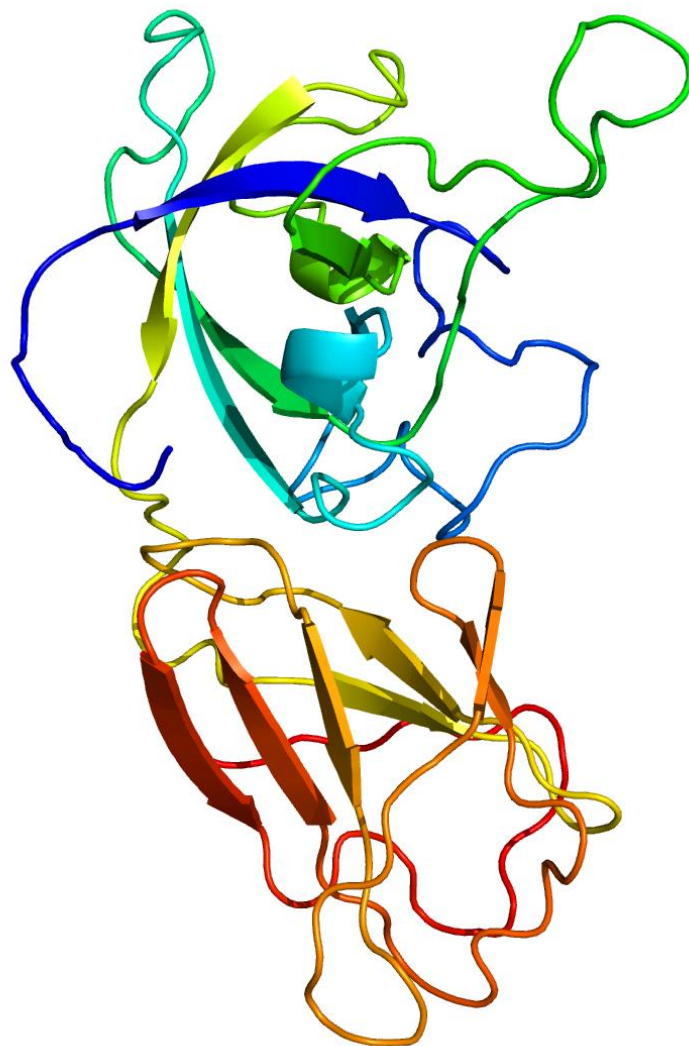
**Locus:** Manes.03G086100

**Gene Model:** Manes.03G086100.1

**Description:** MsEXPA-10

**Family:** Alpha Expansin

**3D structure:**



## GENOME DATABASES

Phytozome: [https://phytozome-next.jgi.doe.gov/info/Mesculenta\\_v7\\_1](https://phytozome-next.jgi.doe.gov/info/Mesculenta_v7_1)

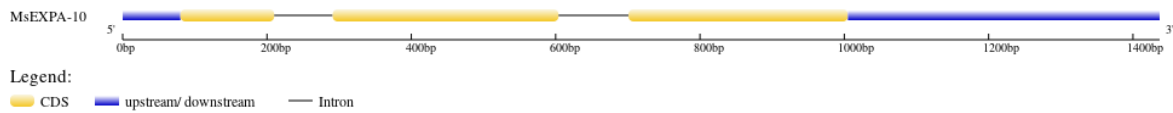
KEGG: <https://www.genome.jp/entry/T05761>

## EXTERNAL RESOURCES

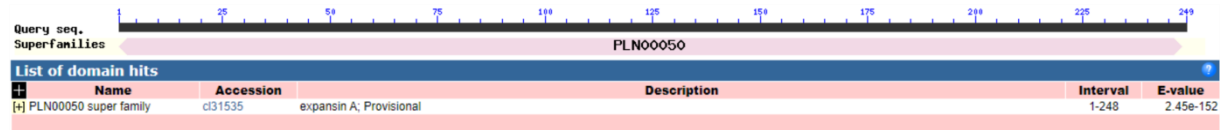
<https://cassavagenome.org/>

<https://cassavabase.org/>

## GENE STRUCTURE



## DOMAIN ARCHITECTURE



## SEQUENCES

### Peptide

>MsEXPA-10

MELLYGTIAALVLTILRTVQGGAEWINAHATFYGGADASGTMGGACGYGNLYSQ  
YGTNTAALSTALFNSGLSCGACFEIKCVNDNQWCLPGSIFITATNFCPPNYALPNNAG  
GWCNPPQHFDLSQPVFQHIAQYKAGIIPVQYRRVPCRKTGGVRFTINGHSYFNLVLI  
TNVGGAGDVVSYSIKGSKTNWQAMSRNWQNWQSN SYLNGQALS LKVTT SNGHTL  
ICNNVAPSNWAFGQTFTGGQF\*

### CDS (coding sequence)

>MsEXPA-10

ATGGAATTGCTTGGCTACACCATTGCAGCCCTTGTGCTGACAATTTTGAGGACAG  
TTCAAGGCCAAGGAGCTGAGTGGATTAATGCCCATGCTACCTTCTATGGAGGGGC  
TGATGCATCTGGGACAATGGGTGGGGCTTGTGGGTATGGGAATCTTTACAGTCAA  
GGGTATGGAACAAATACTGCTGCATTGAGTACTGCTCTTTTCAACAGCGGGTTGA  
GCTGTGGAGCCTGCTTTGAGATCAAATGTGTAAATGACAACCAATGGTGCTTGCC  
TGTTCAATTTTATCACTGCTACTAATTTTGGCCACCAAATTATGCCTTGCCTA  
ATAATGCTGGAGGCTGGTGCAACCCTCCTCAGCATCACTTTGATCTTTCTCAGCCT  
GTCTTTCAACACATTGCTCAGTACAAAGCTGGAATAATCCCTGTTCAATATAGAA  
GGTTCCGTGCAGGAAGACAGGAGGAGTTAGATTCACAATTAATGGGCACTCAT  
ACTTTAACCTAGTGCTTATAACCAATGTGGGTGGAGCTGGTGATGTGGTTAGTGT  
TTCAATAAAAGGTTCTAAAACCAACTGGCAAGCCATGTCAAGGAAGTGGGGCCA  
GAACTGGCAGAGCAACTCATACCTAAATGGTCAAGCTCTCTCTTTGAAGGTCACA  
ACAAGCAATGGGCACACTCTCATCTGCAACAATGTGGCTCCTTCCAAGTGGGCTT  
TTGGCCAAACCTTCACTGGAGGCCAATTCTAA

### Nucleotide

>MsEXPA-10

ACAATATTCCTTCACTGCCTTCTTTCAAATTGCTCTCTTGCTAGGCTAGCCATCTCT  
TCTTTTTTATTTCTCTGCAGGAAATGGAATTGCTTGGCTACACCATTGCAGCCCTT  
GTGCTGACAATTTTGAGGACAGTTCAAGGCCAAGGAGCTGAGTGGATTAATGCC  
ATGCTACCTTCTATGGAGGGGCTGATGCATCTGGGACAATGGGTAAGCTAAAGGG  
GAAAAAAATGATGTTTTTCTTAATTAATTTTATTTACCATTAATTGGGTCATGGT  
CCTTTTTTGCAGGTGGGGCTTGTGGGTATGGGAATCTTTACAGTCAAGGGTATGG  
AACAATACTGCTGCATTGAGTACTGCTCTTTTCAACAGCGGGTTGAGCTGTGGA  
GCCTGCTTTGAGATCAAATGTGTAAATGACAACCAATGGTGCTTGCCTGGTTCAA

TTTTTATCACTGCTACTAATTTTTGCCCACCAAATTATGCCTTGCCTAATAATGCT  
GGAGGCTGGTGAACCCCTCCTCAGCATCACTTTGATCTTTCTCAGCCTGTCTTTCA  
ACACATTGCTCAGTACAAAGCTGGAATAATCCCTGTTCAATATAGAAGGTCCTGA  
TTGCCCCATTTAGTATAAACTCAAATATATGTGCGTATATTAGTCGAGTTCGAA  
TTCGAGATCTCACAGTGAAATTATATGTATGCAGGGTTCCGTGCAGGAAGACAGG  
AGGAGTTAGATTCACAATTAATGGGCACTCATACTTTAACCTAGTGCTTATAACC  
AATGTGGGTGGAGCTGGTGTATGTGGTTAGTGTTTCAATAAAAAGGTTCTAAAACCA  
ACTGGCAAGCCATGTCAAGGAACTGGGGCCAGAACTGGCAGAGCAACTCATACC  
TAAATGGTCAAGCTCTCTCTTTGAAGGTCACAACAAGCAATGGGCACACTCTCAT  
CTGCAACAATGTGGCTCCTTCCAACCTGGGCTTTTGGCCAAACCTTCACTGGAGGC  
CAATTCTAATAGTTTTCTAAACTTGCATGCCCAACAATAAGCTAACCAAAATCA  
CCCTATTTTCCAGATTAAGCCTAACAGAAAAATTTAATCCTAGTCCTATTATAT  
AAGGTGTTTCAATGGGGGAATTTTTCTTTTTTAAAATGACCCCATTAGATATTTAT  
ATGTATGAGTTTGTGTCTGACTTGTAGGTGCAGGTAATTAAGTGTATAAGGCATC  
TGCTAAGTGGTAATTGGTGGGTGTGATTTTGGCAGTGGTGAAAGGAACTTCTCA  
CCCTCTTGAAAGAGTTGGCTTTTTTTTTTTTTTCGGGCCTAGTCTGTGAAAGAGAT  
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TGTTATGTTCTACCAGTGGAATAATTAACTTTTTATTTGTGGACTAATTC