

## IDENTIFICATION

**Species:** *Manihot esculenta*

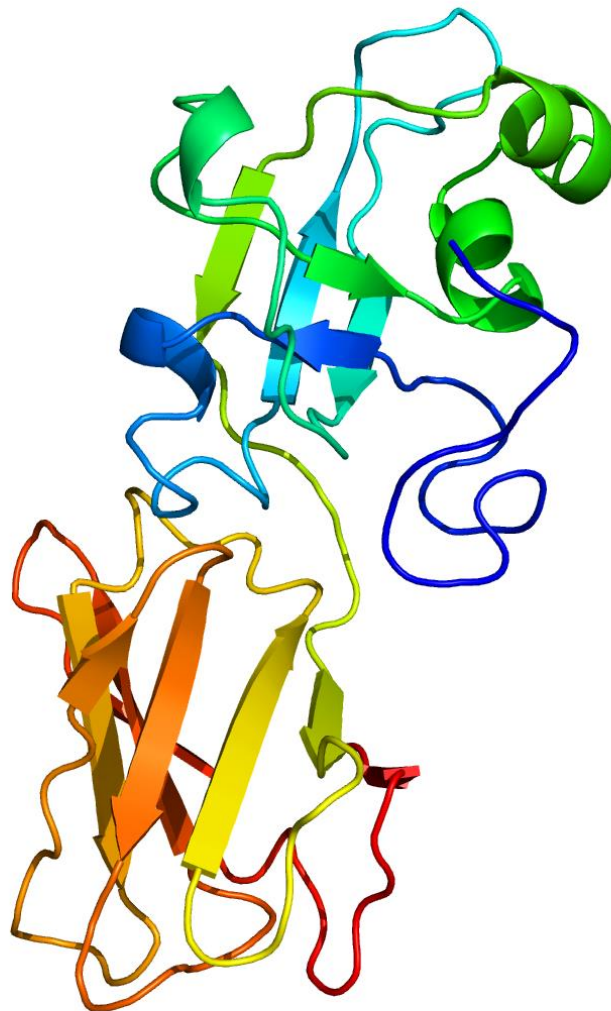
**Locus:** Manes.06G090900

**Gene Model:** Manes.06G090900.1

**Description:** MsEXPA-15

**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)

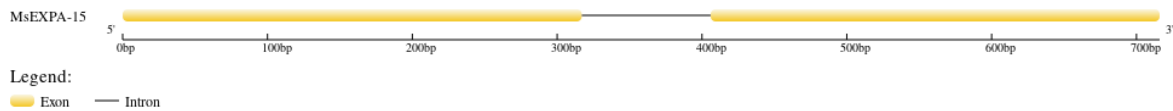
KEGG: <https://www.genome.jp/entry/T05761>

## EXTERNAL RESOURCES

<https://cassavagenome.org/>

<https://cassavabase.org/>

## GENE STRUCTURE



## DOMAIN ARCHITECTURE

Query seq. FSYAGACGYGNLYSQGYGKDNAALSTALFNNGLSGACFEIKWRDPQWCLPGSVV  
VTATNFCPQTSMTMLEAGAILLCIILISLSLSSELLSLEQLCPVSYRRVPCEKKGGIRF  
SINGHSYFNLILITNVGGAGDIHAVSVKGSKTGWQPM SRNWGQNWQSN TYLNGQSL  
SFMVTISDGRTVICNDIVPAGWSFGQTFITDQQFD\*

Superfamilies PLN00050

List of domain hits				
Name	Accession	Description	Interval	E-value
PLN00050 super family	cl31535	expansin A; Provisional	5-207	1.98e-83

## SEQUENCES

### Peptide

>MsEXPA-15

FSYAGAACGYGNLYSQGYGKDNAALSTALFNNGLSGACFEIKWRDPQWCLPGSVV  
VTATNFCPQTSMTMLEAGAILLCIILISLSLSSELLSLEQLCPVSYRRVPCEKKGGIRF  
SINGHSYFNLILITNVGGAGDIHAVSVKGSKTGWQPM SRNWGQNWQSN TYLNGQSL  
SFMVTISDGRTVICNDIVPAGWSFGQTFITDQQFD\*

### CDS (coding sequence)

>MsEXPA-15

TTCTCTTATGCAGGTGCGGCCTGTGGGTATGGAAACCTATACAGCCAAGGTTACG  
GGAAAGACAATGCAGCTTTGAGCACAGCATTGTTCAACAATGGCTTGAGCTGTGG  
AGCCTGTTTTGAAATAAAATGGAGGGACCCGCAGTGGTGCCTACCAGGCTCAGTT  
GTGGTTACAGCTACCAATTTCTGCCACAGACCTCACTAACCATGCTGGAGGCTG  
GTGCAATCCTCCTCTGCATCATTTTGATCTCGCTCAGCCTGTCTTCTAGCGAATTG  
CTAAGTTTAGAGCAGGGATTGTGCCCGGTGTCTTATAGAAGGGTACCATGCGAGA  
AGAAAGGAGGAATAAGATTCTCAATCAATGGGCACTCATACTTCAACTTAATACT  
GATAACCAACGTTGGAGGTGCTGGCGATATTCATGCAGTTTCAGTAAAAGGGTCA  
AAAAGTGGATGGCAACCCATGTCAAGAACTGGGGTCAAAACTGGCAAAGCAAC  
ACATACCTCAACGGACAAAGCCTCTCGTTTATGGTGACAATTAGTGATGGACGCA  
CTGTGATCTGTAATGATATAGTACCTGCTGGGTGGTCCTTCGGCCAGACCTTCATT  
ACCGACCAACAGTTTGATTAA

### Nucleotide

>MsEXPA-15

TTCTCTTATGCAGGTGCGGCCTGTGGGTATGGAAACCTATACAGCCAAGGTTACG  
GGAAAGACAATGCAGCTTTGAGCACAGCATTGTTCAACAATGGCTTGAGCTGTGG  
AGCCTGTTTTGAAATAAAATGGAGGGACCCGCAGTGGTGCCTACCAGGCTCAGTT  
GTGGTTACAGCTACCAATTTCTGCCACAGACCTCACTAACCATGCTGGAGGCTG  
GTGCAATCCTCCTCTGCATCATTTTGATCTCGCTCAGCCTGTCTTCTAGCGAATTG  
CTAAGTTTAGAGCAGGGATTGTGCCCGGTGTCTTATAGAAGGTATATCATAATG  
CACTTGCATGTCTCTCAATATAGATTTCAGCGCTGTTTATCAAAAATTGGGATTTA  
TATATGAAATTTATTATAGGGTACCATGCGAGAAGAAAGGAGGAATAAGATTCTC  
AATCAATGGGCACTCATACTTCAACTTAATACTGATAACCAACGTTGGAGGTGCT  
GGCGATATTCATGCAGTTTCAGTAAAAGGGTCAAAACTGGATGGCAAACCCATGT  
CAAGAACTGGGGTCAAAACTGGCAAAGCAACACATACCTCAACGGACAAAGCC

TCTCGTTTATGGTGACAATTAGTGATGGACGCACTGTGATCTGTAATGATATAGT  
ACCTGCTGGGTGGTCCTTCGGCCAGACCTTCATTACCGACCAACAGTTTGATTAA