

## IDENTIFICATION

**Species:** *Musa acuminata*

**Locus:** GSMUA\_Achr2P21970\_001

**Gene Model:** GSMUA\_Achr2P21970\_001

**Description:** MacEXPA-11

**Family:** Alpha Expansin

**3D structure:**



## GENOME DATABASES

Phytozome: [https://phytozome-next.jgi.doe.gov/info/Macuminata\\_v1](https://phytozome-next.jgi.doe.gov/info/Macuminata_v1)

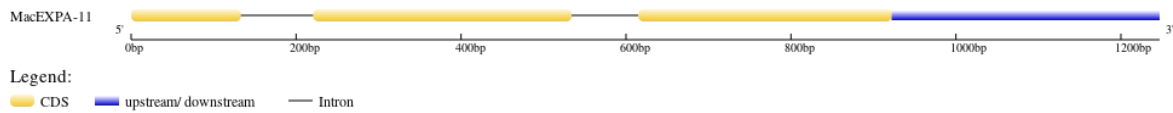
KEGG: <https://www.genome.jp/entry/T03447>

## EXTERNAL RESOURCES

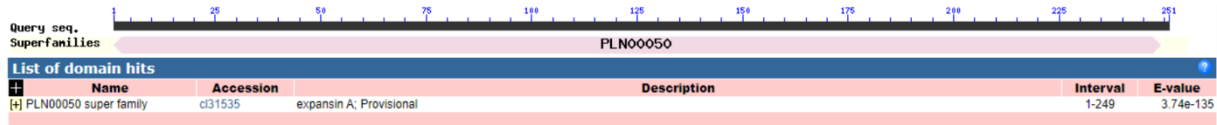
<https://banana-genome-hub.southgreen.fr/>

<https://musabase.org/>

## GENE STRUCTURE



## DOMAIN ARCHITECTURE



## SEQUENCES

### Peptide

>MacEXPA-11

MALLELVLVAFASLLSAGEGYGGRGRWSRAHATFYGGSDASGTMGGACGYGNLYS  
QGYGTNTAALSTALFGDGLSCGACYQIVCVKDRRNLGRSVVVTATNFCPPNSALPN  
DAGGWCNPPLQHFDLSQPVFLRIAQYRAGIVPVA YRRVPCRKRGGIRFTVNGHSYFN  
LVLITNVGGAGDVHAVAVRGARTGWQSMSRNWQNWQSN AFLDGQSLSFKVTTS  
GRSVVSYDVAPATWSFGQTFSGGQFH\*

### CDS (coding sequence)

>MacEXPA-11

ATGGCGCTGCTTGAGCTGGTTTTGGTTGCTTTTGCCTCGCTGCTCTCTGCTGGGGA  
GGGGTACGGAGGAAGAGGAAGGTGGAGCAGAGCACATGCCACCTTCTACGGAGG  
AAGTGATGCGTCAGGGACGATGGGAGGAGCTTGTGGCTATGGCAACTTGTACAG  
CCAAGGGTATGGAACCAACACCCGACGCTCTGAGCACTGCCCTCTTCGGCGACGGC  
CTCAGCTGCGGAGCTTGCTACCAGATTGTGTGCGTGAAAGACCGCCGGAATTGTC  
TGCGAGGATCCGTTGTGGTCACCGCCACCAACTTCTGCCACCCAACAGCGCCCT  
CCCAAACGACGCCGGTGGGTGGTGTAAATCCCCCCTGCAGCACTTCGACCTATCT  
CAGCCCCTGTTCCTCCGCATCGCTCAGTACAGAGCTGGAATCGTGCCGGTTGCAT  
ACCGCAGGGTCCCCTGCAGGAAGAGAGGGCGGCATCAGGTTACCGTCAATGGCC  
ACTCCTACTTCAACCTGGTGCTCATCACCAACGTCGGAGGAGCAGGGCAGCTGCA  
TGCGGTGGCCGTCAGGGGAGCCAGGACGGGGTGGCAGTCCATGTCCAGGAACTG  
GGCCAGA ACTGGCAGAGCAACGCCTTCTCGACGGCCAGTCCCTCTCCTTCAAG  
GTCACCACCAGCGACGGCCGCTCCGTCGTCTCCTACGACGTGGCTCCTGCAACCT  
GGTCGTTTCGGACAAACCTTCAGCGGTGGCCAATTCCACTGA

### Nucleotide

>MacEXPA-11

ATGGCGCTGCTTGAGCTGGTTTTGGTTGCTTTTGCCTCGCTGCTCTCTGCTGGGGA  
GGGGTACGGAGGAAGAGGAAGGTGGAGCAGAGCACATGCCACCTTCTACGGAGG  
AAGTGATGCGTCAGGGACGATGGGTGTGACTGCGGAACAGTCTTTTATGCTCGCG  
AAGCTGTAGCGTAATAACACGCGAATCTGATGAATGGCGACTGTTGGCATTGCA  
GGAGGAGCTTGTGGCTATGGCAACTTGTACAGCCAAGGGTATGGAACCAACACC  
GCAGCTCTGAGCACTGCCCTCTTCGGCGACGGCCTCAGCTGCGGAGCTTGCTACC

AGATTGTGTGCGTGAAAGACCGCCGGAATTGTCTGCGAGGATCCGTTGTGGTCAC  
CGCCACCAACTTCTGCCACCCAACAGCGCCCTCCCAAACGACGCCGGTGGGTGG  
TGTAATCCCCCCTGCAGCACTTCGACCTATCTCAGCCCGTGTTCCCTCCGCATCGC  
TCAGTACAGAGCTGGAATCGTGCCGGTTGCATACCGCAGGTAGGCGACCAGCTTG  
CGTCTTCCTTCCTTTTTCTTCTGCCTTCCGCCCTGATGTCGTTTCTTCTGGTTCCGC  
GATGTCAGGGTCCCCTGCAGGAAGAGAGGGCGGCATCAGGTTACACGTC AATGGC  
CACTCCTACTTCAACCTGGTGCTCATCACCAACGTCGGAGGAGCAGGCGACGTGC  
ATGCGGTGGCCGTCAGGGGAGCCAGGACGGGGTGGCAGTCCATGTCCAGGAACT  
GGGGCCAGA ACTGGCAGAGCAACGCCTTCCCTCGACGGCCAGTCCCTCTCCTTCAA  
GGTCACCACCAGCGACGGCCGCTCCGTCGTCTCCTACGACGTGGCTCCTGCAACC  
TGGTCGTTCCGACAAACCTTCAGCGGTGGCCAATTCCACTGAGAAGCACATGTGA  
CGTGCTTACGTTAGAGAGTAACCCATAATTCTAAGCATAGAGTGATGGATGAAG  
ATTAAAAGGGCTTATTTTACCTTGGCCTTTCATGGTGTTAGAGTCTGTGTGTAAGC  
CTTATATCAATGGCTTGCTGTTCTTAGAGGGGAAGACACAGCTTAAGAAGCTGCT  
CGTCTTCTTAGGGAGTAGTCAGAAAGTGGTGGCATTCTACCTCTCATTCTCCTGA  
GGCGCATCTGAAGAGAAGGCTTCTTCTGTGACTCATCGTCACCACTGCTTGTAT  
CATGTCATTTATGCAAGTGAAGTTATATGGCAGA