

## IDENTIFICATION

**Species:** *Populus trichocarpa*

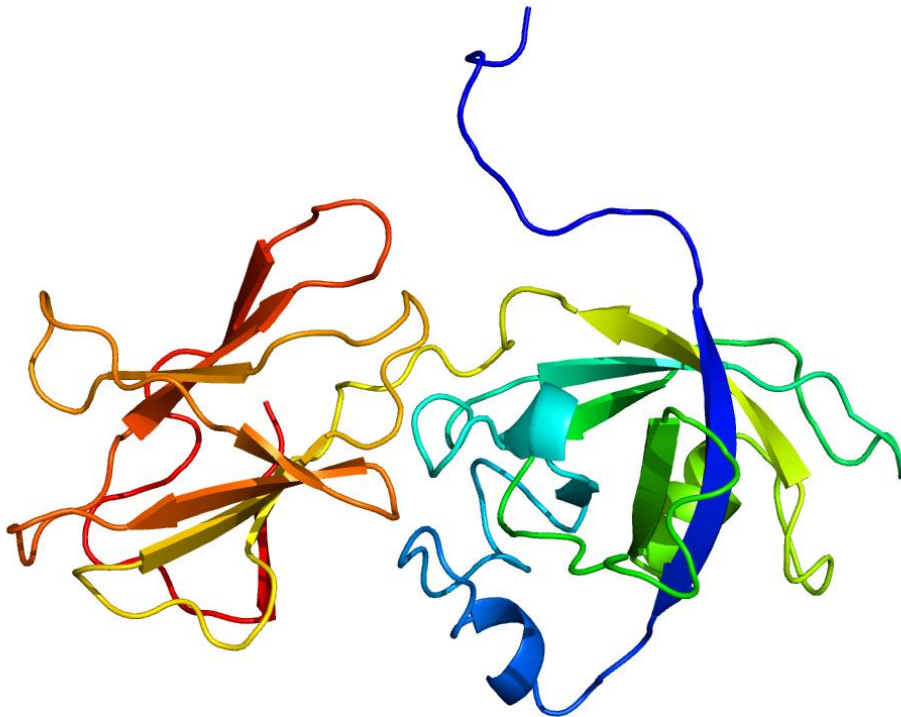
**Locus:** Potri.004G123200

**Gene Model:** Potri.004G123200.3.p

**Description:** PtEXPA-09

**Family:** Alpha Expansin

**3D structure:**



## GENOME DATABASES

Phytozome: [https://phytozome-next.jgi.doe.gov/info/Ptrichocarpa\\_v4\\_1](https://phytozome-next.jgi.doe.gov/info/Ptrichocarpa_v4_1)

KEGG: <https://www.genome.jp/entry/gn:T01077>

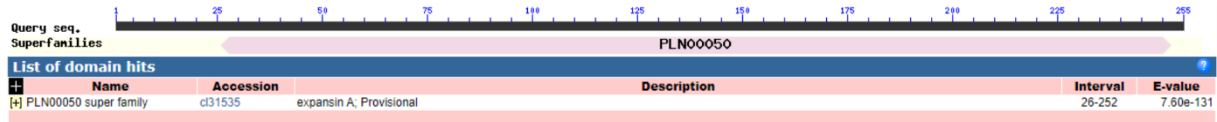
## EXTERNAL RESOURCES

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## GENE STRUCTURE



## DOMAIN ARCHITECTURE



## SEQUENCES

### Peptide

>PtEXPA-09

MFLRGVHLILCRKMALLGFLLVGFLSSVSSVHGYGGWINAHATFYGGGDASGTMG  
GACGYGNLYSQYGTNTAALSTALFDNGLSCGACFEIRC VNDPQWCLPGVIVVTAT  
NFCPPGGWCDPPNHFDLSQPVFQHIAQYRAGIVPVIYRRIRCRRSGGIRFTINGHSYF  
NLVLITNVGGAGDVHSSVAIKGSRTGWQSMSRNWQNWQSN SYLNGQSLSFVVTTS  
DGRSVVSYNVAPAGWSFGQTYSGGQYRY\*

### CDS (coding sequence)

>PtEXPA-09

ATGTTCTTAAGGGGGTTCATCTAATTTTGTGCAGGAAAATGGCTCTTCTTGGTTT  
TCTTTTAGTGGGGTTTCTCTCCTCTGTCTCTTCTGTTCATGGATATTATGGAGGTTG  
GATTAACGCTCATGCCACTTTCTATGGAGGTGGCGATGCTTCAGGGACAATGGGT  
GGGGCTTGTGGCTATGGAAATCTGTACAGCCAGGGTTATGGAAC TAACACCGCAG  
CACTGAGCACTGCATTGTTCGACAATGGTTTGAGCTGTGGGGCTTGTCTTGAGAT  
CAGATGTGTAAATGATCCACAGTGGTGCCTGCCTGGCGTAATTGTGGTCACCGCT  
ACTAACTTCTGCCCTCCCGGCGGCTGGTGTGATCCTCCCAACCATCATTTTGATCT  
CTCTCAACCTGTCTTCCAACACATTGCCCAATATAGAGCCGGAATTGTCCCAGTA  
ATCTACAGAAGGATAAGATGCAGGAGGAGCGGAGGCATTTCGGTTCACCATCAAT  
GGCCACTCATACTTCAATTTAGTCCTGATTACCAATGTTGGCGGTGCTGGCGATGT  
GCATTCAGTGGCCATCAAAGGTTTCGAGAACTGGGTGGCAATCAATGTTCGAGAAA  
CTGGGGCCAAA ACTGGCAGAGTAACTCTTACCTTAATGGACAGAGTCTCTCTTTT  
GTAGTGACGACTAGCGATGGCCGCAGTGTGGTTTCTTACAATGTCGCCCTGCTG  
GTTGGTCTTTGGGCAGACGTATAGTGGAGGGCAGTATAGGTACTAG

### Nucleotide

>PtEXPA-09

CTCTTCAATCCTCCCCTCCCCTCTTCATTTCCCTTCAAGAAAATTCTTCCAAGGTTT  
ATCACATTTTCTAGTAACATTATATATCTGTTTACCATTGAATTCCTTTTGTTTTCC  
TTAGTACTAGCTATAATGTTTTCGAAATAATTAATAGCTTTACA ACTTGTATTAA  
TTTATAGGTAGCTACAATGTTCCCTAAGGGGGTTCATCTAATTTTGTGCAGGAAA  
ATGGCTCTTCTTGGTTTCTTTTAGTGGGGTTTCTCTCCTCTGTCTCTTCTGTTCAT  
GGATATTATGGAGGTTGGATTAACGCTCATGCCACTTTCTATGGAGGTGGCGATG

CTTCAGGGACAATGGGTATGTGAGACATGTATTCTTTTTTTCTTTTTGATAGGAA  
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ACTTTTTCATGCTTTATTAATTCCGCTCAGAACTTCTTAACCTAACAGATTAATGA  
GGTTACGGATTGTTATAGGATAAGATGCAGGAGGAGCGGAGGCATTCGGTTCAC  
CATCAATGGCCACTCATACTTCAATTTAGTCCTGATTACCAATGTTGGCGGTGCTG  
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CTGCTGGTTGGTCCTTTGGGCAGACGTATAGTGGAGGGCAGTATAGGTACTAGCA  
ACGATTGCCTGTCTTGGAAAAAGACATATAAAATATGCAGTATTATCAAGCAACA  
CGCCGGCGGCACCATTAATGAAGATGTAGTGCTCTCTGTGTTTGTGCAAGACAG  
AAAGTATATGGTCAACGTACCTTGGGTCAATGTCTCTTATGAATTAGCCCTAATTC  
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TCCTTCTGCACCACTTTGGTTCAG