

## IDENTIFICATION

**Species:** *Populus deltoides*

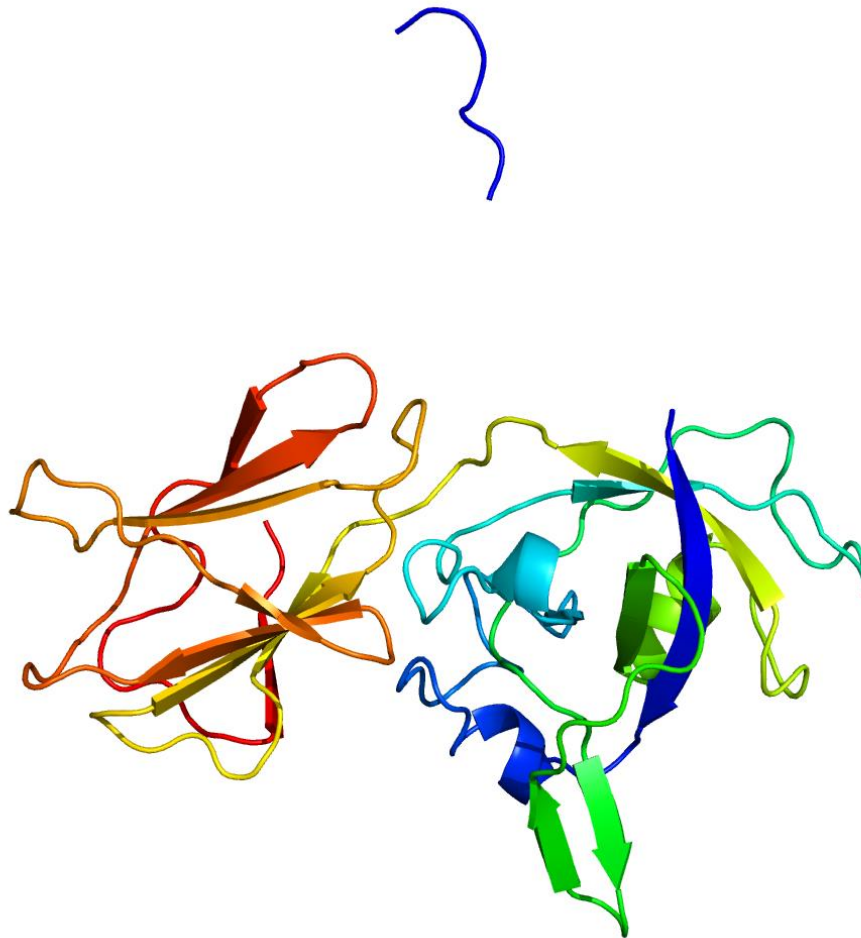
**Locus:** Podel.16G103400

**Gene Model:** Podel.16G103400.1.p

**Description:** PdEXPA-22

**Family:** Alpha Expansin

**3D structure:**



## GENOME DATABASES

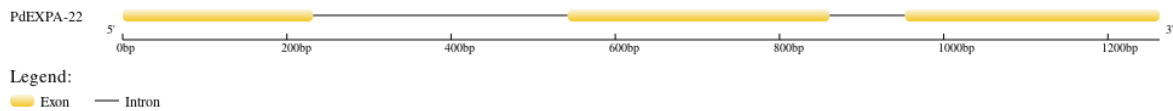
Phytozome: [https://phytozome-next.jgi.doe.gov/info/PdeltoidesWV94\\_v2\\_1](https://phytozome-next.jgi.doe.gov/info/PdeltoidesWV94_v2_1)

KEGG:-

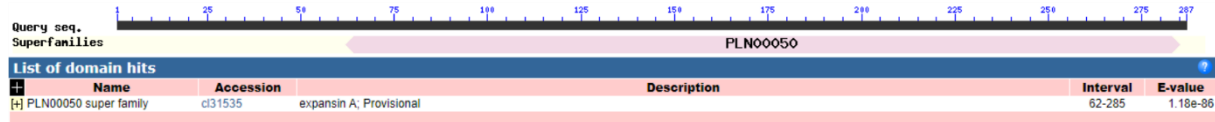
## EXTERNAL RESOURCES

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## GENE STRUCTURE



## DOMAIN ARCHITECTURE



## SEQUENCES

### Peptide

>PdEXPA-22

MASPLKPLATLLLLAIAFPNCHAKSKPSLSGKQAIHHAIGRLAHDIELPERHKPKFQP  
GPWKESHATFYEGGSGTFGGACNYKDVAGQGYGMNTAALSSVLFKNGQACGACFE  
IKCADNPQWCKLGQPSLIVTATDHCPPNPSLPNDNGGWCNVPREHFDVAKPVFSQLA  
EYEAGIPIQYRRVPCQKQGGIRFTILGNPWFYQVIVWNVGGAGDVVGVQVKGDDKL  
KWTQMERDWGTTWKTSAILLGESLSFRVVSASDDRSTSWHVTPKNWQFGQTYEGK  
NFK\*

### CDS (coding sequence)

>PdEXPA-22

ATGGCATCGCCTTTGAAACCCATGTTAGCAACATTGCTGCTTTTAGCCATTGCCTT  
TCCTAATTGCCATGCAAATCAAACCTTCCCTCTCAGGGAAACAAGCCATTCAC  
CATGCAATTGGACGACTAGCCCACGACATTGAACTTCCCGAAAGGCATAAACCA  
AAGTTCCAGCCAGGCCCATGGAAGGAATCTCATGCAACTTTCTATGAAGGCGGCT  
CAGGAACATTCGGGGGAGCATGCAATTACAAAGATGTTGCGGGCCAAGGATATG  
GCATGAATACAGCTGCACTGAGCAGTGTCTGTTCAAAAATGGACAGGCCTGTGG  
TGCTTGTTTCGAAATCAAGTGCGCTGACAACCCTCAATGGTGCAAGCTAGGGCAG  
CCATCTCTCATTGTCCTGCAACTGACCATTGCCACCAAATCCATCTCTCCCAA  
TGACAATGGAGGCTGGTGCAATGTGCCACGTGAGCATTTCGATGTAGCCAAGCCT  
GTATTTAGCCAGCTTGCTGAGTACGAGGCCGGCATTATTCCAATCCAATATCGCA  
GGGTTCCATGCCAGAAGCAAGGAGGTATTCGATTCACTATATTGGGGAATCCTTG  
GTTCTATCAGGTCATTGTGTGGAATGTAGGGGGAGCTGGAGATGTTGTTGGTGT  
CAAGTGAAGGGAGATGACAAGCTCAAGTGGACGCAAATGGAACGAGATTGGGG  
GACAACTTGAAAACCAAGTGCTATTTTGCTTGGAGAGTCGCTATCCTTCCGTGTTA  
GTGCAAGCGATGACAGGGACTCGACTTCATGGCATGTTACCCCTAAAACTGGCA  
ATTTGGCCAGACATACGAGGGCAAGAACTTCAAATAG

### Nucleotide

>PdEXPA-22

ATGGCATCGCCTTTGAAACCCATGTTAGCAACATTGCTGCTTTTAGCCATTGCCTT  
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CTTACAAGTGATCGATAATCCTGTTACCTTACAAAACGACCAAATCCAAC TTC  
CAATATGGTCTTTTCGTTAGCTAAAATTCATTCAATATTGCGAGGCTTCTTGCCA  
AGAGCAGTATGATGAGAACATTTTTCTATATTTTCATTAAAAATACATTGTAAAA  
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GACCATTGCCACCAAATCCATCTCTCCCAAATGACAATGGAGGCTGGTGCAATG  
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CGAGGCCGGCATTATTCCAATCCAATATCGCAGGTCACATGACTTTTCAATCTTTT  
CCCATTTGGCAATATTTTAAAATTTAGAAGGGTTGAGTTTCTTAATTA AAAAGCGTT  
CATTTCCCTGCAGGGTTCCATGCCAGAAGCAAGGAGGTATTCGATTC ACTATATT  
GGGGAATCCTTGGTTCTATCAGGTCATTGTGTGGAATGTAGGGGGAGCTGGAGAT  
GTTGTTGGTGTTC AAGTGAAGGGAGATGACAAGCTCAAGTGGACGCAAATGGAA  
CGAGATTGGGGGACA ACTTGGAAAACCAGTGCTATTTTGCTTGGAGAGTCGCTAT  
CCTCCGTGTTAGTGCAAGCGATGACAGGGACTCGACTTCATGGCATGTTACCCC  
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