

## IDENTIFICATION

**Species:** *Panicum hallii* HAL

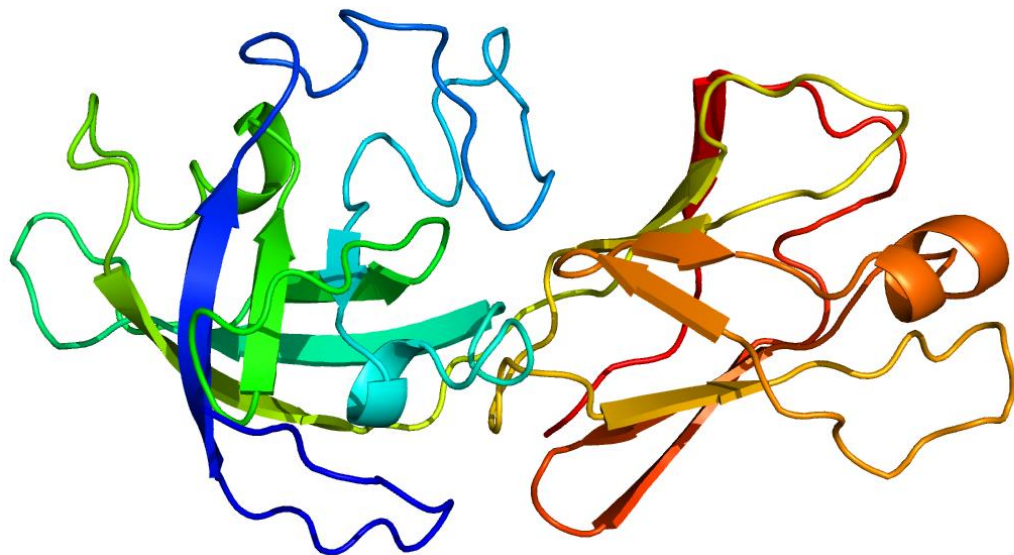
**Locus:** PhHAL.4G366000

**Gene Model:** PhHAL.4G366000.1.p

**Description:** PhhEXPA-12

**Family:** Alpha Expansin

**3D structure:**



## GENOME DATABASES

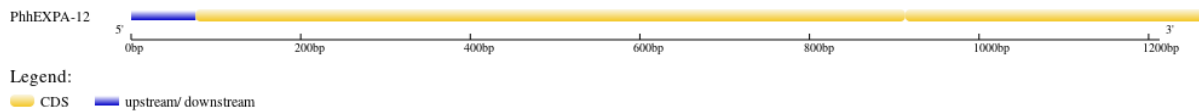
Phytozome: [https://phytozome-next.jgi.doe.gov/info/PhaliiHAL\\_v2\\_1](https://phytozome-next.jgi.doe.gov/info/PhaliiHAL_v2_1)

KEGG:-

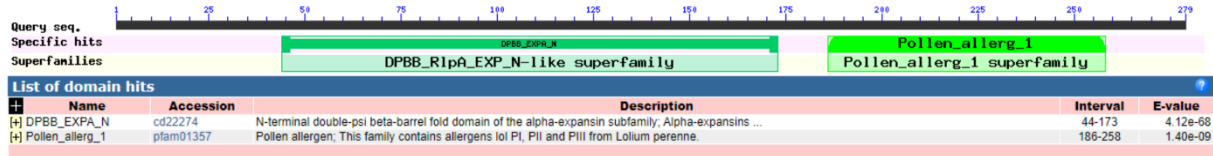
## EXTERNAL RESOURCES

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## GENE STRUCTURE



## DOMAIN ARCHITECTURE



## SEQUENCES

### Peptide

>PhhEXPA-12

MARTSWSSAMVVAAALVMAAAAQAQVASAYHYQQPPAFRASDWQDGSATFY  
GDDSLGADFGGACGFGASDILSLYSTYTAALSTPLFSQGNCGCQCYELRCVNSRWC  
NPGSPSVTVTGTNLCPPNWYLPDNDGGWCNPPRQHFDMAPPSFYRLAQRVAGIIPVQ  
FRRVPCRRPGGVRLCLQGNYYWLLVYVMNVAGGGDVSDLAVKRAGDPDCNYAHA  
SHNWGITYQVFGAQGNARGLVVKMTSYSSPQQTIVVDDAIPAGWSTGLCYQGSNNF  
Y\*

### CDS (coding sequence)

>PhhEXPA-12

ATGGCGAGAACTAGTTGGTCGTCGGCGATGGTCGTGGCTGCTGCATTGGTCATGG  
CAGCCGCTGCGGCACAAGCACAAGTGGCGAGTGCCTACCATTACCAGCAGCAGC  
CGCCCGCCTTCAGGGCGTCCGACTGGCAGGACGGCAGCGCCACCTTCTACGGCGA  
CGACTCCGGCCTTGGCGCGGACTTCGGCGGCGCGTGC GGCTTCGGCGCCAGCGAC  
ATCCTGTCCCTCTACTCCACGTACACGGCGGGCGCTGAGCACGCCGCTCTTCTCGCA  
GGCAACGGGTGCGGGCAGTGCTACGAGCTCCGCTGCGTCAACTCCCGGTGGTGC  
AACCCCGGCTCGCCGTCGGTCAACCGTCAACCGGACCAACCTCTGCCCGCCAACT  
GGTACCTCCCAGCGACAACGGCGGCTGGTGAACCCGCGCGGCAGCACTTCG  
ACATGGCGCCGCCCTCCTTCTACCGCCTCGCGCAGCGGGTTCGCGGGAATCATCCC  
CGTCCAGTTCCGCCGCGTCCCGTGCCGGAGGCCCGGTGGGGTCAGGCTCTGCCTG  
CAGGGGAATACTACTGGCTGCTCGTCTACGTCATGAACGTCGCCGGCGGGGGG  
ACGTCAGCGACCTGGCCGTCAAGCGCGCCGGGGACCCCGACTGCAACTACGCGC  
ACGCCAGCCACA ACTGGGGGATCACGTACCAGGTCTTCGGCGCGCAGGGGAACG  
CGCGGGGGCTCGTCGTCAAGATGACCAGCTACAGCTCGCCGACGACACCATCGT  
CGTCGACGATGCCATAACCGCAGGATGGAGCACAGGACTCTGCTACCAGGGATC  
AAACA ACTTCTATTGA

### Nucleotide

>PhhEXPA-12

CACACATCTATATACATCCCCGATCGGTCAAGAACTAGCCCGCCGGCCGGACGG  
CGGCGAGCTTGTAGATCTGTCATGGCGAGAACTAGTTGGTCGTCCGGCGATGGTCCG

TGGCTGCTGCATTGGTCATGGCAGCCGCTGCGGCACAAGCACAAGTGGCGAGTGC  
GTACCATTACCAGCAGCAGCCGCCCGCCTTCAGGGCGTCGGACTGGCAGGACGG  
CAGCGCCACCTTCTACGGCGACGACTCCGGCCTTGGCGCGGACTTCGGCGGGCGCG  
TGCGGCTTCGGCGCCAGCGACATCCTGTCCCTCTACTCCACGTACACGGCGGGCGC  
TGAGCACGCCGCTCTTCTCGCAGGGCAACGGGTGCGGGCAGTGCTACGAGCTCCG  
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TCTTCGGCGCGCAGGGGAACGCGCGGGGGCTCGTCGTCAAGATGACCAGCTACA  
GCTCGCCGCAGCAGACCATCGTCGTCGACGATGCCATAACCCGCAGGATGGAGCA  
CAGGACTCTGCTACCAGGGATCAAACAACCTTCTATTGACGATAGGATCATCATCA  
GATCTATATATTCAGACCTGCTGCGTGCTGCTAGCTTTTGGATCTTCATTTCGTTGA  
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TGTGGATCCATTTTATATATGCTCCCTTGAGTTATTTATTTGGGTTTCGTATATTAG  
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CACGTATGTATGTGTTCTTCTCGTCCTATAAAAATTAAAGATTCCTTTTTCTTTGTT  
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