

## IDENTIFICATION

**Species:** *Panicum hallii* HAL

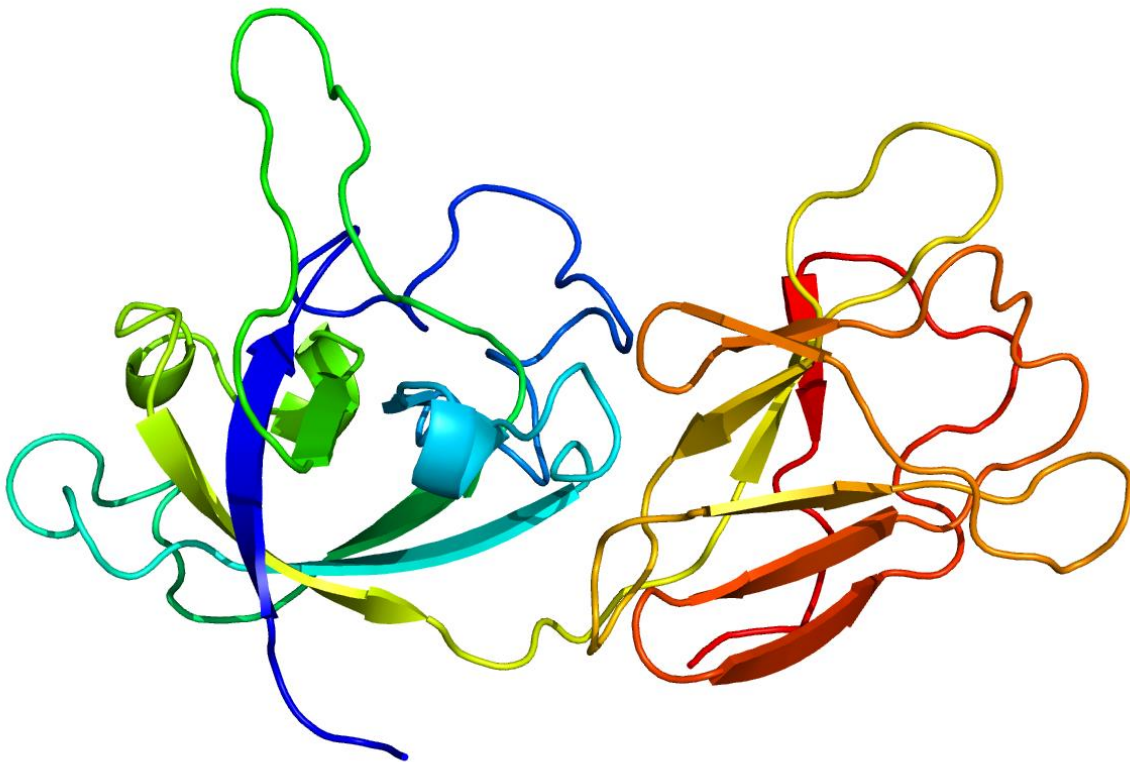
**Locus:** PhHAL.9G234500

**Gene Model:** PhHAL.9G234500.1.p

**Description:** PhhEXPA-23

**Family:** Alpha Expansin

**3D structure:**



## GENOME DATABASES

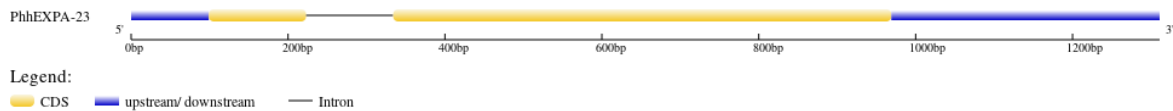
Phytozome: [https://phytozome-next.jgi.doe.gov/info/PhalliiHAL\\_v2\\_1](https://phytozome-next.jgi.doe.gov/info/PhalliiHAL_v2_1)

KEGG:-

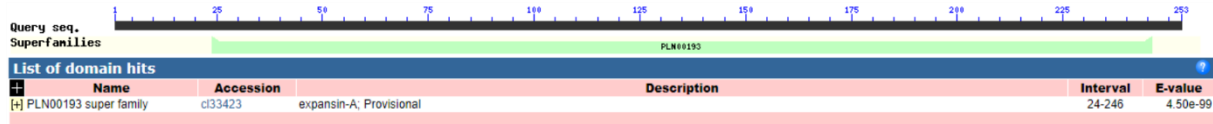
## EXTERNAL RESOURCES

-

## GENE STRUCTURE



## DOMAIN ARCHITECTURE



## SEQUENCES

### Peptide

>PhhEXPA-23

MDTAKSLILCTVLAACLGLAAAWSQGTATHYGGADGSGTMGGACGYDNLNAG  
YGVLNAALSQTLFKDGASCGQCYLITCDGSRPGGQNCKPGNSITVSATNLCPPNYGL  
PNGGWCGPGRPHFDMSQPAFENIGVYQAGIIPVLYQQVQCKRSGGVRFISIAGSSYFLL  
VNIQNLGSGSVGAAWVKGDKTGWIQMSRNWGANWQALAGLVGQGLSFAVTSTG  
GQYIQFPNVAPAWWQFGQFTFTNNLNFAY\*

### CDS (coding sequence)

>PhhEXPA-23

ATGGATACGGCAAAGTCCCTGATCTTGTGCACAGTCCTTGCGGCGTGCCTCGGGC  
TCGCCGCCGCCCTGGTCTCAGGGCACCGCCACGCACTACGGCGGAGCCGACG  
GCTCCGGCACCATGGGTGGCGCCTGCGGGTACGACAACCTTTACAACGCCGGGTA  
CGGCGTGCTCAACGCGGCGCTGAGCCAGACGCTGTTCAAGGACGGCGCGTCGTG  
CGGGCAGTGCTACCTCATCACCTGCGACGGCTCGCGGCGGGCGGCCAGAACTGC  
AAGCCCAGCAACAGCATCACCGTCTCGGCCACCAACCTGTGCCCGCCCAACTACG  
GGCTGCCAACGGCGGCTGGTGC GGCCCGGGGCGCCCCACTTCGACATGTCGCA  
GCCGGCGTTCGAGAACATCGGCGTCTACCAGGCCGGCATCATCCCGGTCTCTAC  
CAGCAGGTCCAGTGCAAGCGCAGCGGGCGGCGTGCCTTCAGCATCGCCGGTTC  
GCTACTTCTGCTCGTCAACATCCAGAACCTCGGGCGGAGCGGCTCCGTGGGCGC  
CGCCTGGGTCAAGGGCGACAAGACGGGGTGGATCCAGATGTCCAGGAACTGGGG  
CGCCAACTGGCAGGCGCTGGCCGGCCTCGTCGGCCAGGGGCTCAGCTTCGCCGTG  
ACCAGCACCGGCGGGCAGTACATTCAGTTCCCAACGTCGCGCCGGCGTGGTGGC  
AGTTCGGCCAGACCTTCACCAACAACAACCTGAACTTCGCCTACTGA

### Nucleotide

>PhhEXPA-23

CTCAGAAGCAGTTAGCCTCCATTACCCAGCCTAGCTCCTCGTCCGCTCCCATTTC  
CATCTCGGTCTCTGCAGCTACGTACACCTCTGCATTGGCGTCCATGGATACGGCA  
AAGTCCCTGATCTTGTGCACAGTCCTTGCGGCGTGCCTCGGGCTCGCCGCCGCG  
CCTGGTCTCAGGGCACCGCCACGCACTACGGCGGAGCCGACGGCTCCGGCACCAT  
GGGTACGCTGCCTTTACTGCCTTGCATGCGTCCATTTCTGTACAAGAAAGATTTC  
GCGCACATTTTGCTTGCTCGGCTGCCCGTCAACTGATCCAATGCATGTACTATGTA

GGTGGCGCCTGCGGGTACGACAACCTTTACAACGCCGGGTACGGCGTGCTCAACG  
CGGCGCTGAGCCAGACGCTGTTCAAGGACGGCGCGTCTGCGGGCAGTGCTACCT  
CATCACCTGCGACGGCTCGCGGCCGGGCGGCCAGAACTGCAAGCCCGGCAACAG  
CATCACCGTCTCGGCCACCAACCTGTGCCCGCCAACTACGGGCTGCCAACGGC  
GGCTGGTGCGGCCCGGGGCGCCCCACTTCGACATGTTCGCAGCCGGCGTTTCGAGA  
ACATCGGCGTCTACCAGGCCGGCATCATCCCGGTCCTCTACCAGCAGGTCCAGTG  
CAAGCGCAGCGGCGGCGTGCGCTTCAGCATCGCCGGTTCAGCTACTTCCTGCTC  
GTCAACATCCAGAACCTCGGCGGCAGCGGCTCCGTGGGCGCCGCTGGGTCAAG  
GGCGACAAGACGGGGTGGATCCAGATGTCCAGGAACTGGGGCGCCAACCTGGCAG  
GCGCTGGCCGGCCTCGTCGGCCAGGGGCTCAGCTTCGCCGTGACCAGCACCGGCG  
GGCAGTACATTAGTTCCCAACGTCGCGCCGGCGTGGTGCCAGTTCGGCCAGAC  
CTTACCAACAACAACCTGAACTTCGCCTACTGAATCTTGCAAACAGGAGAGCGC  
TTTGTTTCCTCCGCCATTTCTTGCAAGTTCGGTGAATGGCGAGTGCATGCTCCTGG  
TTTTTTACGGGAGCTGGTTCAACTTGCCATTGCATCCTTGGTGACCGCCTGACTAG  
CATCTGTCCTAGGTGATGCCCCGACTGCAAGAGGAGGTGCGCGCCATGTATAATT  
TCAAATTTTCGACCTTAATGTATTTTATTTCTCTCATAATTTTTTTCCTAATGTTTTT  
GAATATTTTGTACTTGAGTCTTAAATATACATGTATTCTGTATAAATGAATTAAT  
GGATATTTATTGCTGAGTCAACAAAAAACCATTATCCTTGT