

## IDENTIFICATION

**Species:** *Physcomitrium patens*

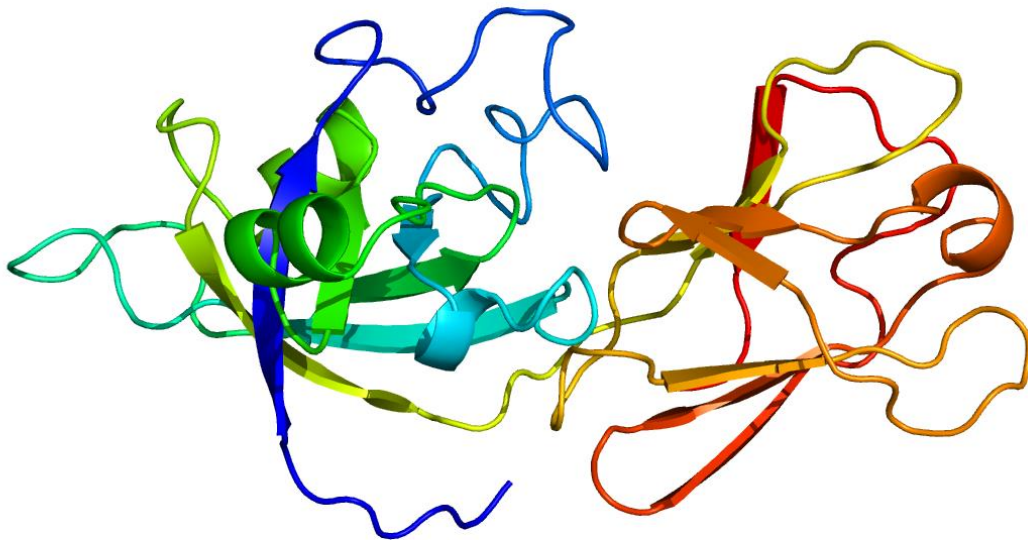
**Locus:** Pp3c13\_20360V3

**Gene Model:** Pp3c13\_20360V3.1.p

**Description:** PpEXPA-22

**Family:** Alpha Expansin

**3D structure:**



## GENOME DATABASES

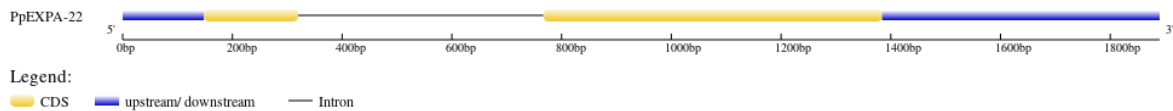
Phytozome: [https://phytozome-next.jgi.doe.gov/info/Ppatens\\_v3\\_3](https://phytozome-next.jgi.doe.gov/info/Ppatens_v3_3)

KEGG: <https://www.genome.jp/entry/gn:T01041>

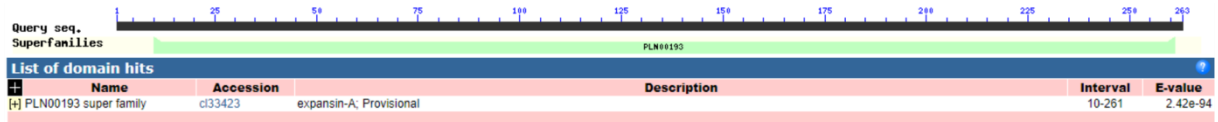
## EXTERNAL RESOURCES

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## GENE STRUCTURE



## DOMAIN ARCHITECTURE



## SEQUENCES

### Peptide

>PpEXPA-22

MAMVVRGNAFAAVLTLVVALDLVARVMLVQASSYLGTNWVSGRAHATFYGGADAS  
GTQGGACGYGNLYSTGYGTSTAALSSALFNSGLSCGACYELTCDTSGSKYCLPGNPSI  
ILTATNYCPQNSNGGWCDAPKQHFDLAHPMFVSLAEERGGVIPVNYRRVPCAkkGG  
MRFQMNGNPWFLLVLVTNVGGAGDVQQLSIKGSNSGWYQMKNRWGQMWQLTGN  
SNMPGQALSFRVLSDGTTVESLDAAPANWHFGQMFEGSQA\*

### CDS (coding sequence)

>PpEXPA-22

ATGGCGATGGTGCCTGGCAATGCTTTTGCAGCCGTTCTGACGCTTGTGGTGGCTTT  
GGATCTGGTTCGCACGCGTGATGCTGGTCCAGGCTAGCAGTTATCTTGGAACCAAC  
TGGGTGAGCGGCAGGGCACATGCCACGTTCTACGGCGGTGCTGATGCCTCTGGCA  
CTCAAGGTGGTGCCTGTGGATATGGAAATCTCTACTCGACTGGATATGGAACCAG  
CACTGCCGCTCTTAGTTCGGCGCTATTCAACAGTGGCCTCTCTTGGCGGCATGCT  
ATGAACTCACCTGTGATACCTCTGGCTCCAAGTACTGCCTTCCCGGAAATCCATCC  
ATCATTCTGACAGCCACTAACTACTGCCCTCAGAACTCCAACGGCGGATGGTGGC  
ACGCTCCCAAGCAGCATTTCGACCTTGCACATCCCATGTTTGTGTCTCTCGCGGAG  
GAGCGTGGCGGTGTTATCCCTGTCAATTACAGAAGAGTCCCTTGCGCGAAGAAAG  
GTGGCATGAGGTTCCAAATGAATGGAAACCCCTGGTTTTTGTCTGGTTCTCGTGAC  
CAACGTCGGCGGGCAGGCGATGTGCAACAGCTCTCCATCAAGGGCTCAAATC  
GGGCTGGTACCAAATGAAACGCAATTGGGGACAGATGTGGCAGCTGACGGGAAA  
CAGCAACATGCCGGGACAAGCTCTCTTTTCAGAGCTGTCCTTAGCGACGGCACA  
ACAGTGGAGTCTTGGACGCTGCCCCAGCTAACTGGCATTTCGGCCAAATGTTT  
AGGGAAGCCAGGCATAA

### Nucleotide

>PpEXPA-22

AAACGTGGGATCGCTGCTTATATATACGCTTCTCTGCCACCACAATCTTCATCAGT  
CGCATTCTGATCCTTTCCCGTAGTACTACCTCTGACGGTCTGCCTGCACAGTCACA  
TATTTCTCCATCAAAGTCCCGGCAACAGCAGCAGCGATGGCGATGGTGCCTGGCA  
ATGCTTTTGCAGCCGTTCTGACGCTTGTGGTGGCTTTGGATCTGGTTCGCACGCGTG  
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ATGCCACGTTCTACGGCGGTGCTGATGCCTCTGGCACTCAAGGTGTGGATCGAAG  
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GATGAATTAGTGTGCTCGTCTGCGTGAAGTCGAGGAATTACCTAATTGCATTTTC  
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ACACACAGCTGTTTATCTAATAACGAAAGCTTTTTTTCGAATGCAGGTGGTGCCT  
GTGGATATGGAAATCTCTACTCGACTGGATATGGAACCAGCACTGCCGCTCTTAG  
TTCGGCGCTATTCAACAGTGGCCTCTCTTGCGGCGCATGCTATGAACTCACCTGTG  
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AGGCGATGTGCAACAGCTCTCCATCAAGGGCTCAAACCTCGGGCTGGTACCAAATG  
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CGTAATAAGATTCAACATTGTTCTACAAGCGATGTCCTGCCATTTGAAGACCTAA  
TCCTTATAA