

## IDENTIFICATION

**Species:** *Zostera marina*

**Locus:** Zosma196g00420

**Gene Model:** Zosma196g00420.1

**Description:** ZmrEXPA-12

**Family:** Alpha Expansin

**3D structure:**



## GENOME DATABASES

Phytozome: [https://phytozome-next.jgi.doe.gov/info/Zmarina\\_v2\\_2](https://phytozome-next.jgi.doe.gov/info/Zmarina_v2_2)

KEGG:-

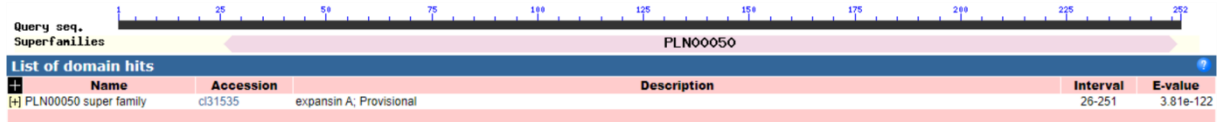
## EXTERNAL RESOURCES

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## GENE STRUCTURE



## DOMAIN ARCHITECTURE



## SEQUENCES

### Peptide

>ZmrEXPA-12

MAPTTIATIAIIFVFSFSICSSSSAAGWEAAHATFYGGADAGGTMGGACGYGNLHKQ  
GYGTNTAALSTSLFDKGRRCGSCYEIRCVDKPKWCLSGSIVVTATNFCPQNPSLPNNN  
GGWCNSPRKHFDLAQPAFLKIAKYRAGIVPVSYRRVRCVKEGGIRFTINGHKEYFNLV  
LITNVAGAGDVQAVKIKGSKTGWKAMFRNWGQNWQSDTNLVGQALSFQVTTSDG  
KTVTAYNVAPTYWKFQTFEGRQL\*

### CDS (coding sequence)

>ZmrEXPA-12

ATGGCACCAACAACCATAGCAACCATAGCAATCATCTTCTTCGTCTTCTCTTTTTC  
TATCTGTAGCTCCTCCTCCGCGGCAGGATGGGAAGCCGCTCATGCAACTTTCTAT  
GGAGGTGCTGATGCTGGCGGCACGATGGGTGGAGCTTGTGGTTATGGCAACTTAC  
ACAAGCAAGGCTATGGTACCAACACAGCTGCTCTTAGCACCTCTCTTTTGGACAA  
AGGTCGAAGATGTGGATCTTGCTACGAAATACGTTGCGTCGACGATCCTAAATGG  
TGTTTATCAGGTTCCATCGTTGTCACCGCCACAACTTCTGTCCGCAAAATCCCTC  
TCTCCCTAACAACAATGGTGGTTGGTGCAACAGTCCACGCAAACTTTGATCTT  
GCCCAACCAGCTTTCTTAAATCGCCAAGTACCGTGCAGGAATAGTTCCAGTAT  
CTTATCGAAGGGTGAGATGTGTGAAGGAAGGAGGAATACGGTTTACGATAAATG  
GGCACAAGTACTTCAACCTTGTCTTGATCACTAACGTAGCCGGAGCTGGCGATGT  
TCAAGCCGTGAAGATCAAGGGTTCGAAGACCGGTTGGAAGGCGATGTTCCGGAA  
CTGGGGTCAGAATTGGCAAAGCGATACTAATCTCGTCGGACAAGCACTATCCTTC  
CAAGTCACAAGTGTGACGGAAAGACCGTTACAGCTTACAATGTTGCTCCGACCT  
ACTGGAAATTTGGGCAAACCTTCGAAGGACGCCAGCTCTAA

### Nucleotide

>ZmrEXPA-12

CAAATTCCACAATGGCACCAACAACCATAGCAACCATAGCAATCATCTTCTTCGT  
CTTCTCTTTTCTATCTGTAGCTCCTCCTCCGCGGCAGGATGGGAAGCCGCTCATG  
CAACTTTCTATGGAGGTGCTGATGCTGGCGGCACGATGGGTAAGTATTGATTAAT  
TTATAATTAATATTCGATCACTTAATCATCTATCTAATTACTATATATATATAC  
ACACACTAGGTGGAGCTTGTGGTTATGGCAACTTACACAAGCAAGGCTATGGTAC  
CAACACAGCTGCTCTTAGCACCTCTCTTTTGGACAAAGGTCGAAGATGTGGATCTT

GCTACGAAATACGTTGCGTCGACGATCCTAAATGGTGTTTATCAGGTTCCATCGTT  
GTCACCGCCACAACTTCTGTCCGCAAAATCCCTCTCTCCCTAACAACAATGGTG  
GTTGGTGCAACAGTCCACGCAAACACTTTGATCTTGCCCAACCAGCTTTCCTTAA  
AATCGCCAAGTACCGTGCAGGAATAGTTCCAGTATCTTATCGAAGGTAACGATCG  
ATGGCTGTCTCGATCTCGATCTCTTTTTTTTTTACAAAAACAGTACTGTATATT  
GAAATTTTACGTTTGTAACAGGGTGAGATGTGTGAAGGAAGGAGGAATACGGTTT  
ACGATAAATGGGCACAAGTACTTCAACCTTGTCTTGATCACTAACGTAGCCGGAG  
CTGGCGATGTTCAAGCCGTGAAGATCAAGGGTTCGAAGACCGGTTGGAAGGCGA  
TGTTCCGGAAGTGGGGTCAGAATTGGCAAAGCGATACTAATCTCGTCGGACAAGC  
ACTATCCTTCCAAGTCACAAGTAGTGACGGAAAGACCGTTACAGCTTACAATGTT  
GCTCCGACCTACTGGAAATTTGGGCAAACCTTCGAAGGACGCCAGCTCTAAATTC  
TACTACATCTGATCTGACTGATGCATGAACACCGATATACTTGTTATCAATAAACT  
CACATGCGATCCATTCTGTGAGGACTTATGTGTATTGACTGTATATTTACTAAAGT  
TTATCTATATATCATCTTACCGAG