

IDENTIFICATION

Species: *Helianthus annuus*

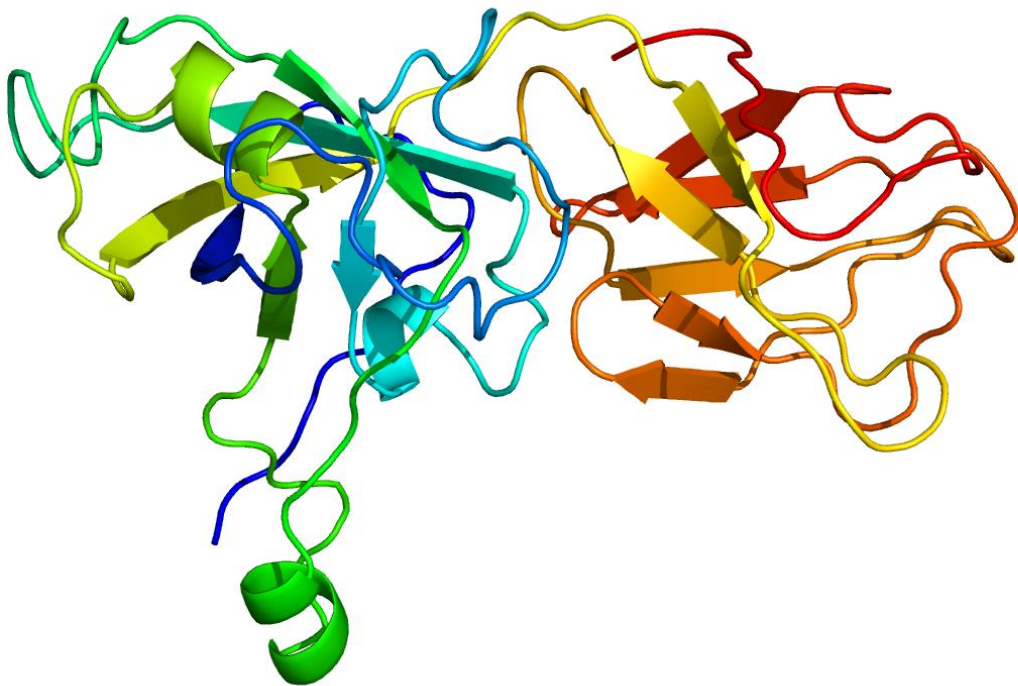
Locus: HanXRQChr08g0236981

Gene Model: HanXRQChr08g0236981

Description: HanEXPA-13

Family: Alpha Expansin

3D structure:



GENOME DATABASES

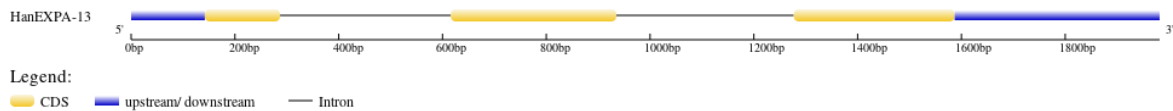
Phytozome: https://phytozome-next.jgi.doe.gov/info/Hannuus_r1_2

KEGG: <https://www.genome.jp/entry/T05101>

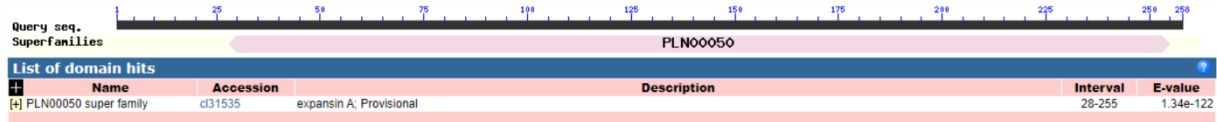
EXTERNAL RESOURCES

<https://www.heliagene.org/>

GENE STRUCTURE



DOMAIN ARCHITECTURE



SEQUENCES

Peptide

>HanEXPA-13

MGIRVGILLIIVSVFSAIDARIPGNYAGGSWESAHATFYGGSDASGTMGGACGYGNLY
SQGYGVNTAALSTALFNKGFSCGACFEIKCTQDPRWCHPGSPSIFITATNFCPPNYALP
NDNGGWCNPPRTHFDLAMPFLKIAEYRAGIVPVS YRRVPCRKKGGIRFTINGFRYF
NLVLISNVAGAGDIQKVWVKGTKTNWMSMSRNWQNWQSNVAVLVGQSLSRVTA
SDRRTSTSWNIVPAHWQFGQFTGKNFRV*

CDS (coding sequence)

>HanEXPA-13

ATGGGCATTCGCGTCGGCATTCTTCTAATCATCGTTTCGGTTTTCTCAGCCATTGA
TGCCAGAATCCCAGGAACTACGCCGGCGGCTCTTGGGAAAGTGCTCATGCCACA
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ACTTGTACAGCCAAGGTTACGGAGTGAACACCGCGGGCGCTAAGTACGGCGTTGTT
TAACAAAGGGTTTAGTTGCGGTGCTTGTGAAATTAATGCACACAAGACCCG
CGGTGGTGCCACCCCGGAAGCCCGTCCATTTTTATTACCGCGACCAACTTTGTCC
GCCTAACTATGCCTTACCTAACGACAACGGTGGCTGGTGTAAACCTCCTCGTACT
CACTTCGACCTTGCTATGCCCATGTTTCTTAAAATCGCTGAGTACCGTGCCGGCAT
TGTCCCGTCTCATATCGCCGGGTGCCATGCAGGAAGAAGGGTGGGATCAGGTTT
ACAATCAACGGTTTCCGTTACTTCAACTTGGTTTTGATCAGCAACGTCGCGGGTGC
AGGGGACATAAAAAGGTGTGGGTGAAAGGCACAAAGACCAACTGGATGAGCAT
GAGCCGTAAGTGGGGTCAAACCTGGCAATCAAACGCGGTCCTGGTTGGTCAGTCA
CTCTCGTTTAGGGTCACAGCTAGTGACCGACGCACATCCACCTCATGGAACATCG
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A

Nucleotide

>HanEXPA-13

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