

IDENTIFICATION

Species: *Helianthus annuus*

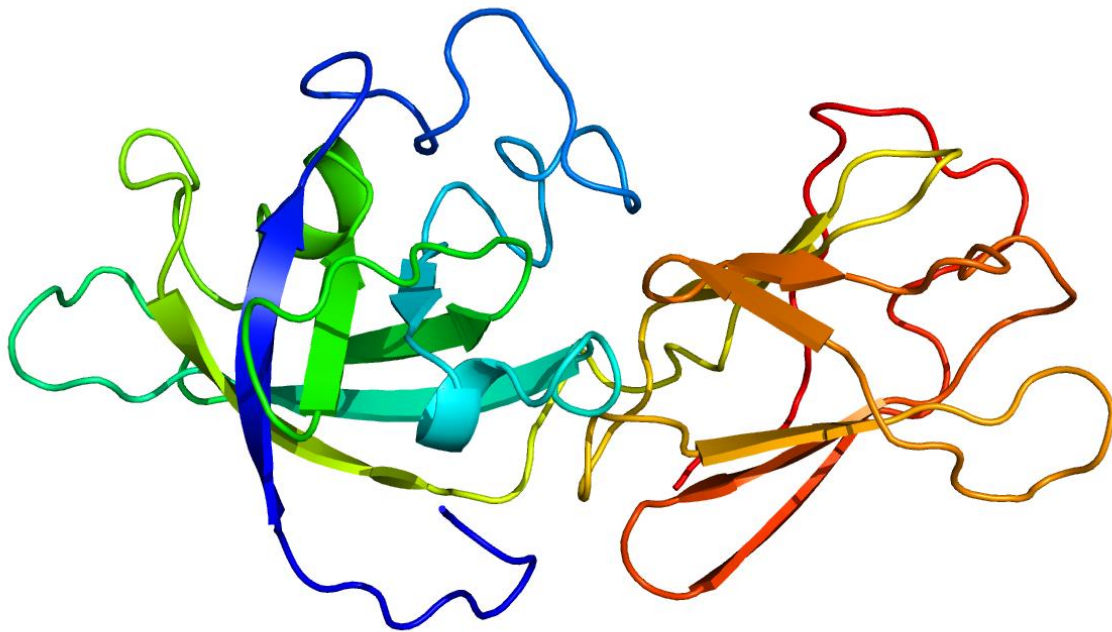
Locus: HanXRQChr13g0386941

Gene Model: HanXRQChr13g0386941

Description: HanEXPA-27

Family: Alpha Expansin

3D structure:



GENOME DATABASES

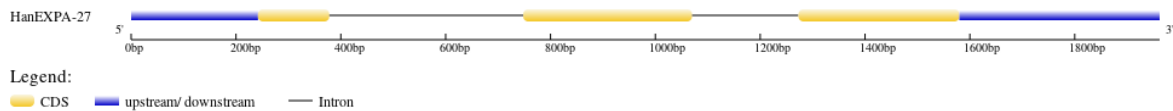
Phytozome: https://phytozome-next.jgi.doe.gov/info/Hannuus_r1_2

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

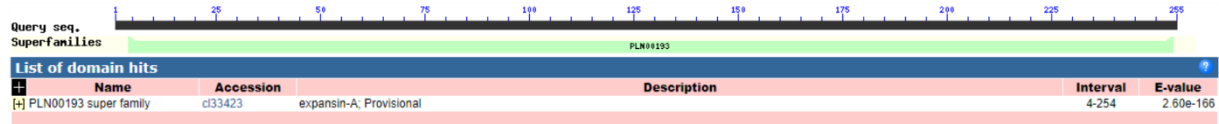
EXTERNAL RESOURCES

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

GENE STRUCTURE



DOMAIN ARCHITECTURE



SEQUENCES

Peptide

>HanEXPA-27

MAKFCALLLLSAICYLVHTDAFTASRWRAHATFYGGSDASGTMGGACGYGNLY
SSGYGTRTAALSTALFNDGAACGQCYKIICDYKADPKWCRKGVSVTITATNFCPPNF
AQPSNAGGWCNPPLQHFDMAQPAWEKIGIYKGGIVPVIYQRPVCKKHGGVRFITNGR
DYFELVLITNVGGAGAIQSVKVKGSKTGWLPMSRNWGANWQSNLYLNGQSMSFMV
TTTDGVTKTFSNIVPANWGFGQTYSSRLQF*

CDS (coding sequence)

>HanEXPA-27

ATGGCTAAATTTGCGCTCTTCTCTTGTATCTGCTATATGTTATTTGTTTGTTCAT
ACCGATGCTTTTACTGCTTCGAGATGGATGAGAGCTCATGCAACCTTTTATGGAG
GCAGTGATGCTTCCGGAACAATGGGAGGGGCTTGTGGGTATGGCAACTTGTACTC
ATCGGGTTATGGTACAAGAACCGCTGCATTGAGTACCGCTCTTTCAACGATGGT
GCGGCTTGTGGACAATGTTACAAAATCATATGTGACTACAAAGCCGACCCAAAGT
GGTGCCGAAAAGGAGTGTCCGTGACCATTACAGCCACAAACTTTTGTCCACCAA
CTTTGCTCAGCCTAGCAACGCCGAGGTTGGTGCAACCCACCACTCCAACATTT
GATATGGCTCAGCCTGCTTGGGAGAAAATCGGCATTTACAAAGGTGGAATCGTGC
CCGTTATCTACCAAAGAGTCCCATGCAAGAAACATGGTGGAGTTAGATTCACTAT
CAACGGACGAGATTATTTTGTGCTTGTTTTGTATAACCAATGTTGGTGGGGCCGGA
GCGATTCAATCAGTGAAGGTTAAGGGCTCGAAAACCGGATGGTTGCCGATGTCG
AGAAATTGGGGGGCTAATTGGCAATCAAACCTCGTATCTAAATGGCCAATCTATGT
CATTTATGGTTACAACCACGGATGGTGTCAAAAGACCTTCTCCAATATCGTGCC
TGCAAACCTGGGGCTTTGGTCAAACCTATTCTAGTCGTCTACAATTCTAA

Nucleotide

>HanEXPA-27

ATGGTTAGATAGAACGTGGGAATGATTGAATCAGATTCAGAATTTCTTCACCCTT
GTGTAGGGATTTTTTTAATTCAAATAAATAATACTCCATTAATTAACCTTCTCTAC
TTGCAGATTTACATGTGATGATGTTGGGTTGGGTAGGTCCTTCCTTATTTAAGTAG
CCCGTCCTCTAATCTTCTTGGCCATCTTCTCCTTAATTCCTCATTGACTAATCAAT
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ATGGTACAAGAACCGCTGCATTGAGTACCGCTCTTTTCAACGATGGTGCGGCTTG
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