

IDENTIFICATION

Species: *Helianthus annuus*

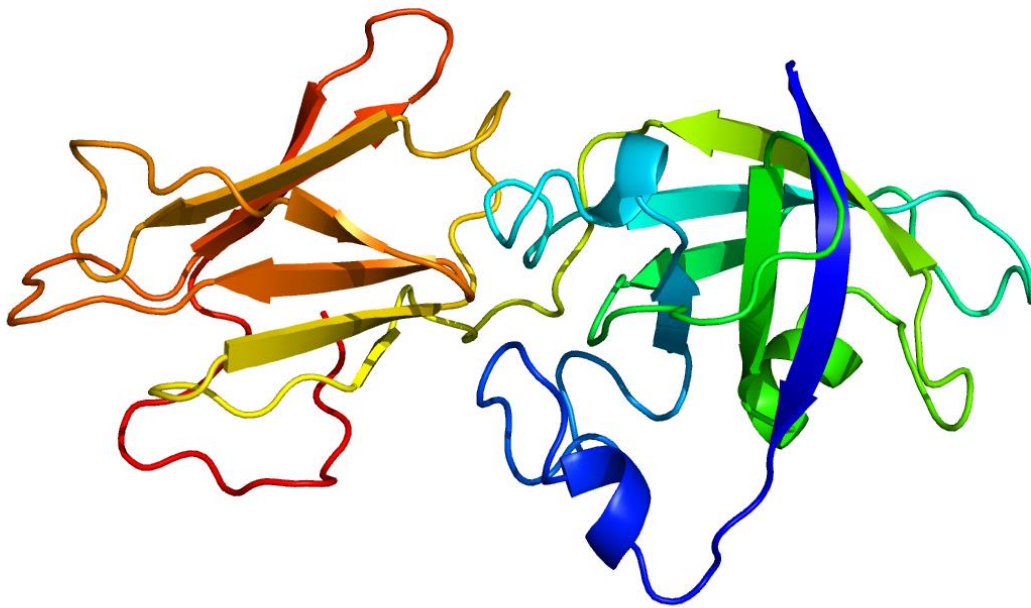
Locus: HanXRQChr09g0262011

Gene Model: HanXRQChr09g0262011

Description: HanEXPA-14

Family: Alpha Expansin

3D structure:



GENOME DATABASES

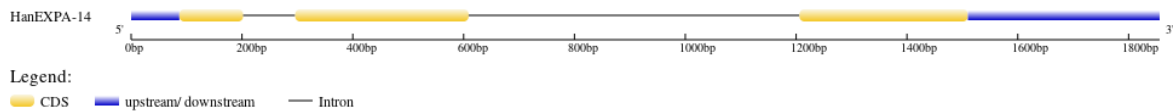
Phytozome: https://phytozome-next.jgi.doe.gov/info/Hannuus_r1_2

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

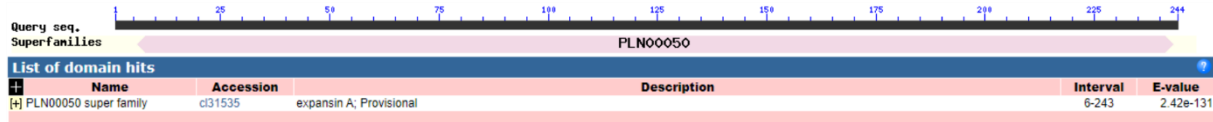
EXTERNAL RESOURCES

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

GENE STRUCTURE



DOMAIN ARCHITECTURE



SEQUENCES

Peptide

>HanEXPA-14

MAFPQIITVALLVSFFNLVYGDYGHATFYGGGDASGTMGGACGYGNLYSQGYGTNT
AALSTALFNGLSCGSCYELRCNDDPKWCLPGSIIVTATNFCPPNPAQPNDGGWCN
PPLQHFDLAEP AFLQIAQYRAGIVPVLFRVPCVKKGGVRFTINGHSYFNLVLITNVG
GAGDVHAVSIKGSKTGWQPMSRNWQNWQSN SYLNGQSLSFQVTTSDGRTITSYNV
APSGWQFGQTFEGGQF*

CDS (coding sequence)

>HanEXPA-14

ATGGCTTTTCCTCAGATCATCACTGTTGCTTTACTTGTGAGCTTCTTCAACCTTGTC
TATGGCGATTACGGTCACGCCACCTTCTATGGTGGAGGAGACGCCTCGGGCACCA
TGGGTGGTGCTTGTGGATATGGGAATTTGTATAGCCAAGGATATGGAACCAATAC
CGCGGCATTAAGTACCGCGCTTTTCAACAACGGGTTGAGTTGTGGGTCATGTTAC
GAGTTGAGATGCAATGATGACCCTAAATGGTGCTTGCCTGGTAGCATAATCGTCA
CTGCCACCAATTTCTGTCCACCTAACCCGGCTCAACCTAACGATGATGGCGGATG
GTGCAACCCTCCTCTCCAACATTTGACTTGGCCGAGCCAGCATTCTTGCAAATAG
CACAATATCGGGCCGGTATCGTGCCTGTCTTGTTC AAAGGGTACCTTGTGTTAA
GAAGGGAGGAGTGAGGTTTACAATAAATGGTCACTCATACTTCAATTTGGTTTTG
ATCACCAACGTCGGCGGTGCAGGTGATGTACATGCTGTATCAATTAAGGATCTA
AAACCGGGTGGCAACCAATGTCACGAAACTGGGGGCAA AATTGGCAAAGTAACT
CGTACCTCAATGGTCAGAGCCTTTCTTTTCAAGTCACCACTAGCGATGGAAGAAC
CATCACGAGCTATAACGTCGCACCAAGCGGTTGGCAGTTTGGTCAAACATTTGAA
GGAGGGCAATTTTAA

Nucleotide

>HanEXPA-14

TGTAACATTTTTCTCCTCCCTGAAAATTCCCCTATATAAGTCTACTTGATTTGGTCAA
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TGAGTTGAACATTTTCATATTGCTCCCCTAGAGGAGAAAATGTGCATTTTTTACT
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