

IDENTIFICATION

Species: *Solanum pennellii*

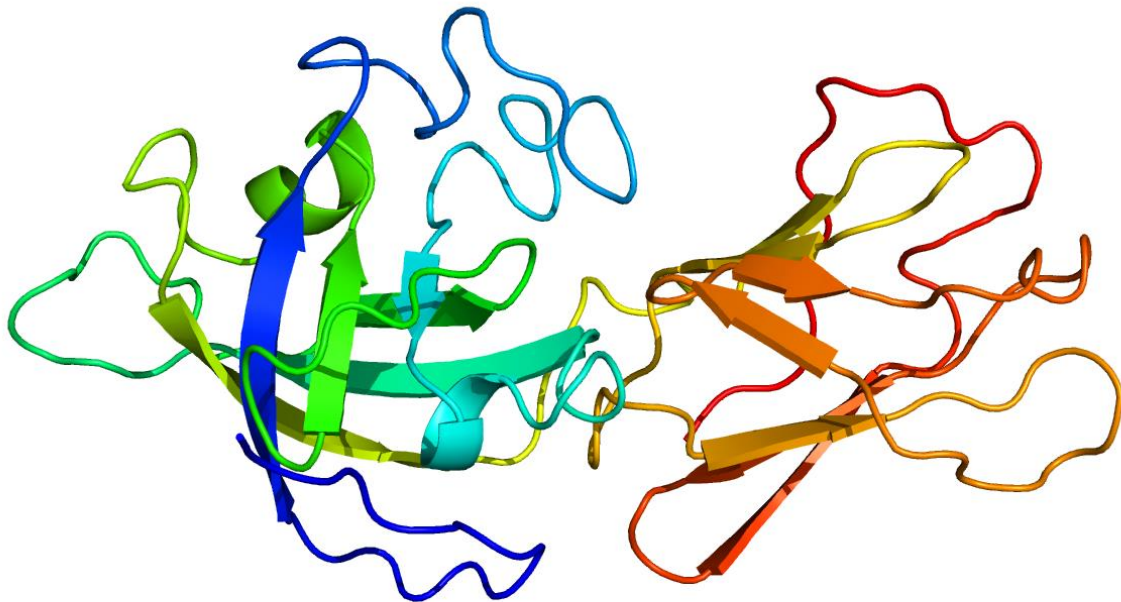
Locus: XP_015089459

Gene Model: XP_015089459.1

Description: SpnEXPA-25

Family: Alpha Expansin

3D structure:



GENOME DATABASES

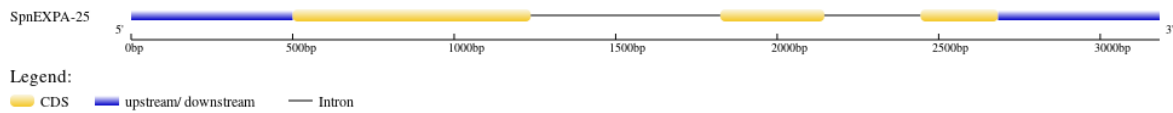
NCBI: <https://www.ncbi.nlm.nih.gov/genome/?term=Solanum+pennellii>

KEGG: <https://www.genome.jp/entry/gn:T04130>

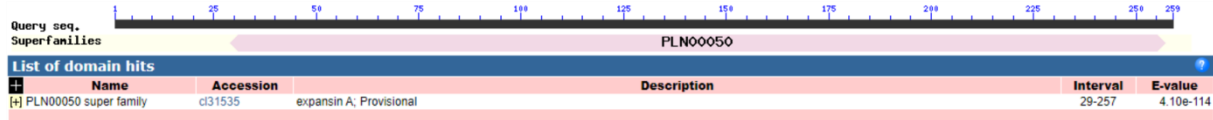
EXTERNAL RESOURCES

https://solgenomics.net/organism/Solanum_pennellii/genome

GENE STRUCTURE



DOMAIN ARCHITECTURE



SEQUENCES

Peptide

>SpnEXPA-25

MAVNWALCIATLLCFLTVVNAKIAGVYTGGPWTSAHATFYGGADASGTMGGACGY
GNLYSQGYGVNNAALSTALFNGLSCGACFEIKCTDSNKA YCNPGNPSILVTGTNFC
PPNYALPNDNGGWCNPPRPHFDLAMP MFLKIAVYRAGIVA VNYRRVPCRKQGGIRF
TVNGFQYFNLVLVTNVAGAGDIQKVYVKGNTNPWISMTRN WGQNWQTNAKLVGQ
ALSFRVTASDRRSSASYNIPANWQFGQTFQGKNFRV

CDS (coding sequence)

>SpnEXPA-25

TTCCCTCTCAATTCTCTCTCTGCTCAAATTCATTTTCCCTTTCTGTCTCTGTTTTCT
TTTTACAGTGAACAAACACTACTGTGACAAAAATGGCTGTGAATTGGGCACTC
TGCATTGCTACTCTTCTCTGTTTTCTAACTGTTGTCAACGCAAAAATTGCCGGAGT
TTACACCGGCGGACCCTGGACAAGTGCCACGCCACCTTCTATGGAGGCGCTGAT
GCTTCTGGAACCATGGGTGGTGCATGTGGGTATGGGAATCTGTACAGCCAAGGGT
ACGGAGTAAACAACGCGGCCTTGAGTACGGCACTTTTCAACAATGGTCTGAGCTG
CGGCGCTTGCTTCGAGATAAAGTGTACTGACAGTAATAAGGCATATTGCAACCCT
GGAAACCCTTCCATCTTGGTAACAGGAACCAATTTCTGCCACCAAATTACGCCT
TGCCTAACGATAATGGAGGCTGGTGTAAACCCACCTCGCCACATTTTCGACCTCGC
CATGCCCATGTTCTCAA AATTGCAGTGTACCGTGCTGGAATTGTTGCTGTCAACT
ACCGAAGGGTTCCATGCAGGAAACAAGGAGGAATCAGATTCACAGTCAACGGTT
TCCAATACTTCAACTTAGTGTTAGTCACCAACGTTGCAGGTGCAGGGGACATTCA
AAAGGTTTATGTTAAAGGCACAAACACGCCATGGATTTC AATGACTCGTAATTGG
GGTCAGAATTGGCAAACAAATGCAAAACTAGTCGGACAAGCACTTTCTTTTAGAG
TCACTGCTAGTGATCGACGCAGCTCTGCTTCATACAACATTGCACCAGCTAACTG
GCAATTTGGACAAACTTTCCAGGGAAAGAATTTCCGCGTTTAATTGCACCAAATT
TAAATAATTATACTGACCTGATCGAAACAAAAGAAAAAATTCTTACAATTTCCCG
CCTTCAATGGTTCTCTTTTTTATCTGGGAAAAATTTTGAAGGGTCCCGGGGATTAG
TTTCTTTTTCTTTTGAATTACTATCAACTCTCTGGGGAATTGGTTTGTACTCTTTT
ATCTACTTTTTCTTTTTGTGTAAGTTGGGTGTTGGTGAAGTTAAAGTAAAAATTA
TAGAGGCTGAAGTGGCTACAAAAGGACCAAATTTAGGGGGGAAATGTAGGCCGC
AGCTTTACTTGCATATTGTTTATTATTATGGTGATGTAATGGCAAATTACTGCCTA
AGTTTATGAATATATTTTTATACTGCAATCTTATATTTGTATTGTTATAACATAG
TGGTGATGTTTCAATTCATGTTTTA

Nucleotide

>SpnEXPA-25

TATGACTTTTGGAAATTTTTTTTTGCTAAACCTTTTGAAACTCTCCGTAAGGAGTT
AGGGATGCAGTACGTGCACATATTTTAGATATTTATGAGTCAATCTATATTTGCTG
AGACCGCCTTGCACCTCAACCCGCTCCGCTCCATTGCCAACTCTTAACTGAGAA
ATTTAAAAGTTGGACTGCAGAAGGAATAGAGAGTAGAAGAAAATAAACTCACAA
TGGCATCAAGTTGCTACATCCAAGGTACAATTATGGCAGCTATTAGCACGTAGCC
AAATATTTTCTTTTTAAAAGTCAAAATATAACTTCCACATTTTGAGAGAATTGAAC
ATATAATACATCTACGGCTTCCTATATATATAAAAAAAAACATTCACAAGACTGG
AAAATTTATTTTCGACATCTTTAACTAAGAGAGAGATATTCATGCATTCTATCACA
ATTCTCGACACATGGTCGAAAGACGCGGAAATGGAAGTTACATTAGAGAGAGTC
AATGTAAAACATGAATTGAAACATCACCCTATGTTATAACAATACAAATATAAG
ATTTGCAGTATAAAAATATATTCATAAACTTAGGCAGTAATTTGCCATTACATCA
CCATAATAATAACAATATGCAAGTAAAGCTGCGGCCTACATTTCCCCCTAAAT
TTGGTCCTTTTGTAGCCACTTCAGCCTCTATAATTTTCACTTTAACTTCACCAACA
CCCACTTACACAAAAAGAAAAAGTAGATAAAAGAGTAACAAACCAATTCCCCA
GAGAGTTGATAGTAATTCAAAAGAAAAAGAACTAATCCCCGGGACCCTTCAA
ATTTTCCCAGATAAAAAAGAGAACCATTGAAGGCGGGAAATTGTAAGAATTTTT
CTTTTGTTCGATCAGGTCAGTATAATTATTTTAAATTTGGTGCAATTAACGCGG
AAATTCTTCCCTGGAAAGTTTGTCCAAATTGCCAGTTAGCTGGTGCAATGTTGTA
TGAAGCAGAGCTGCGTCGATCACTAGCAGTACTCTAAAAGAAAGTGCTTGTCCG
ACTAGTTTTGCATTTGTTTGCCAATTCTGACCCCAATTACGAGTCATTGAAATCCA
TGGCGTGTTCGCTTTAACATAAACCTTTTGAATGTCCCCTGCACCTGCAACGT
TGGTGACTAACACTAAGTTGAAGTATTGGAAACCGTTGACTGTGAATCTGATTCC
TCCTTGTTTCCTGCATGGAACCCTGTAAAAAAACAAAACAGACTTAGCATTAGA
ACAAATGCACCAAAAATGGAAAAACGCGTTCTCCAATTGCAAAATATAGGTGA
AGAGTAGTATTGGGGGACCATTTGTAGATATTAATGAAGCTATACCATAACTAGG
AGTTGTAGGTTTTTGGTATAGCAAGACTATGTCCATTTGCTAAAATTGGGAAGAA
AATAGGACCACACTATGGAAAATATAAAAACTCAATAAATCAATAACGGTTTTGC
TAAAATCCGGGAAATTGGACATTTTAGTCGTCATTAGAAACTTGTTAAATCGAG
AAAATGTGGACGCTAGCTGTAGTAGTTCCAATTTATGTGAAGCTTGTGATCCAAA
AAAAAGGTATACAAAGTGATAATATTGTATATTATAGGGAAGCTCAAATCAGCTC
CGTAAATACAGGGAACTGCAAAGTTTAGTTTAACTAATCCAAAGCATAATTTGG
TATGAAAGGAGTATAAAAGTTTGTCTACAAGATTATCATTACCACAATTCAAAC
TATTATATTTAATTGTGGAATGAACAATTGATGGAATTTATAGCTAATTAGGTAA
CTAACCTTCGGTAGTTGACAGCAACAATTCCAGCACGGTACACTGCAATTTTGAG
GAACATGGGCATGGCGAGGTCGAAATGTGGGCGAGGTGGGTACACCAGCCTCC
ATTATCGTTAGGCAAGGCGTAATTTGGTGGGCAGAAATTGGTTCCCTGTTACCAAG
ATGGAAGGGTTTCCAGGGTTGCAATATGCCTTATTACTGTCAGTACACTTTATCTC
GAAGCAAGCGCCGAGCTCAGACCATTGTTGAAAAGTGCCGTACTIONCAAGGCCG
GTTGTTACTCCGTACCCTGGCTGTACAGATTCCCATACCACATGCACCACCTA
CACATTGTAATTCATCACTAAAATTAACCTTCTAAAATAATGTGAAAACAGAGT
AATGGAACCAAATTCAAAGTTTAGCTAATGTTTCACTGTAGATTTTGAATCAGAT
TTTAAAATTTTCTTCAAATATCTGTTTGGCCGTCAAATTTATCAAGTTCCGAAGAA
ATTTCACTTTCCAAATAAAATATATGTTAAAATACAACCTTTGAAAACCTCAAATTC
AAAGTATATGGCTTAGGCTTCACGAGTACCAAAATATATACAGTATGTCTAGATT
CAGAGACAGGTACAGTACCATGGTTCCAGAAGCATCAGCGCCTCCATAGAAGG
TGGCGTGGGCACTTGTCCAGGGTCCGCCGGTGTAAACTCCGGCAATTTTTGCGTT
GACAACAGTTAGAAAACAGAGAAGAGTAGCAATGCAGAGTGCCCAATTCACAGC

CATTTTTGTCACAGTGTAGTGTTTGTTCACTGTAAAAAGAAAACAGAGACAGAAA
GGGAAAATGGAATTTGAGCAGAGAGAGAATTGAGAGGGAAAGGAAAGTGAGGT
GCGTATTTATTGAAGAGTTGCAATGGCAATGTCCGTAATTAATACTACTACTCT
GTTTTCGTTAATTTAAAATTTTATTCCTCTTCTTTTATTTTATGGTTTTTTTCAACA
TTGATAATTCTTCACCTTTTTTTCCCATCAATATAGTATTAATATTTCAAGAACAA
AGTTTATTAGTACGAAAATTGTTTAGTTGATTCCCACCTCAAATATCATACAACCTT
AATTTATAAATACAAAAATATAAGATGAAATTAGTGGTATTTATAAATATTAAT
TTTATATAAAATATCTCGTAATTCTTACACAAATTTGGAGAATAGTTTTCTAAAAT
TACTTGACTGATATTTGTAAATATAATATAGTCTTGACTTAAATAAGATACATATC
TTCATCTAAACGTGCACTTGACAAAATGGAGAGAAGGGGTAATATGTGTGAGA
GTTATAATGCTTGTATATATTTATCATGGTTTATGCATGTA