

## IDENTIFICATION

**Species:** *Theobroma cacao*

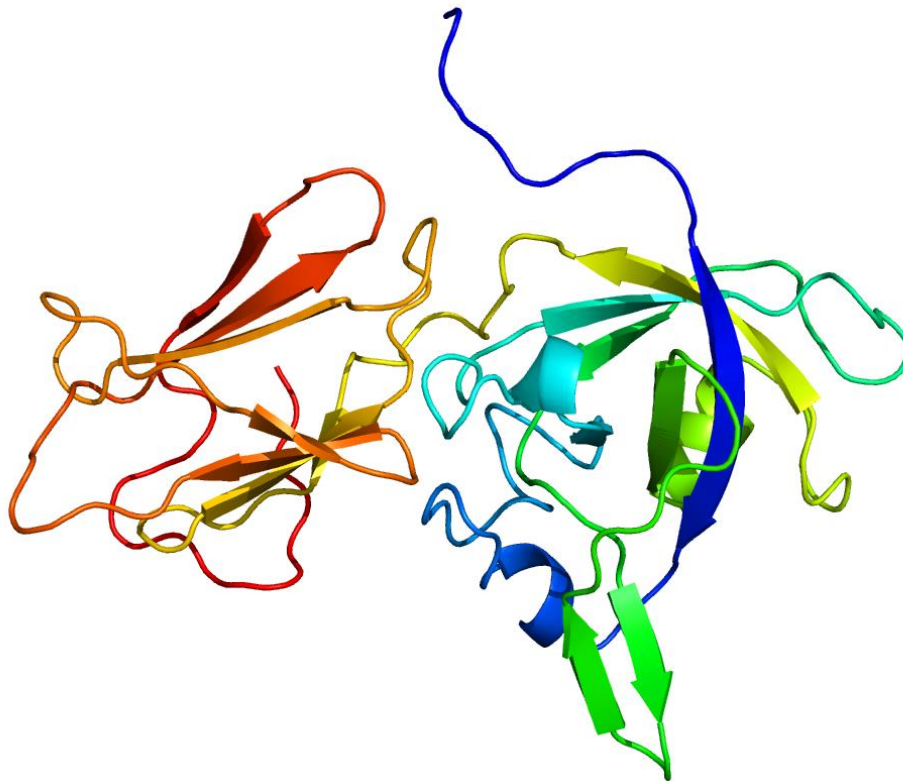
**Locus:** Thecc.10G181900

**Gene Model:** Thecc.10G181900.1.p

**Description:** TcEXPA-19

**Family:** Alpha Expansin

**3D structure:**



## GENOME DATABASES

Phytozome: [https://phytozome-next.jgi.doe.gov/info/Tcacao\\_v2\\_1](https://phytozome-next.jgi.doe.gov/info/Tcacao_v2_1)

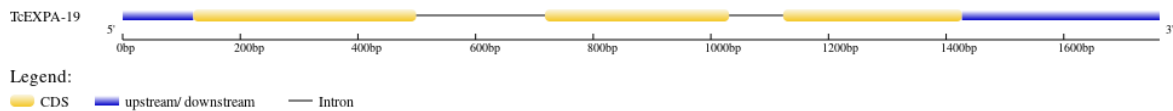
KEGG: <https://www.genome.jp/entry/gn:T02994>

## EXTERNAL RESOURCES

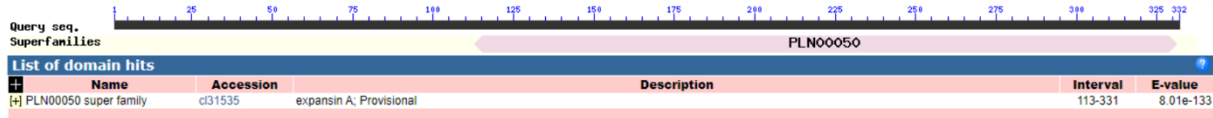
<https://www.cacaogenomedb.org/>

<https://cocoa-genome-hub.southgreen.fr/node/4>

## GENE STRUCTURE



## DOMAIN ARCHITECTURE



## SEQUENCES

### Peptide

>TcEXPA-19

MKSVFVVLPSHQREDCLLVSSFSSRPHRTAPRPFPFISYINPFSHPYVHKHQALNTPSL  
LITLSLSLTSQVLQLIFTMAKAGLSAASLLLFLNFCLRGAYGDYGGGWEGGHATFY  
GGGDASGTMGGACGYGNLYSQGYGTNTAALSTALFNGLSCGSCYEMRCDNDPK  
WCLAGSIIVTATNFCPPNNALSNDNGGWCNPPQLQHFDLAEP AFLQIAQYRAGIVPISFR  
RVPCTKKGIRFTINGHSYFNLVLITNVGGAGDVHAVSIKGSNTGWQPM SRNWGQN  
WQSN SYLNGQSLSFQVTTSDGRTVTSYNVVPGSWQFGQTFEGGQF\*

### CDS (coding sequence)

>TcEXPA-19

ATGAAATCCGTTTTTCGTGGTATTGCCTTCTCTCATCAACGTGAGGATTGCTTGCT  
TGTCTCTTCCTTCTCTTCACGTCCACATCGCACCGCCCCAGACCTTTTCCATTTAT  
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CACCAAGCCTTTTAATTACCCTCTCTCTCTCTCACCTCTCAAGTACTCCAGCTA  
ATATTCACAATGGCAAAGCAGGATTGTCTGCAGCTTCTCTTCTGCTCTTTCTCTT  
CAATTTTGCCTGCGAGGGGCCTATGGTGACTACGGGGGAGGATGGGAAGGTGG  
TCATGCTACATTCTATGGTGGTGGTGATGCATCTGGCACAATGGGAGGTGCTTGT  
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A

## Nucleotide

>TcEXPA-19

ATAAGATAAGAAAACATTGATAAATGCATGTGCAGGTGGGGGCCATGCGGCATA  
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