

***EgExp4* Full length Information**

Length: 2586 bp (Same as report)
START Codon: 1045-1047 (Checked)
STOP Codon: 2006-2008 (Checked)
T → C SNP: 118
TC → T deletion: 989

BLAST Information

Name: expansin-A2 [*Elaeis guineensis*]
Sequence ID: XP_010938009.1
Exon1: 1005-1119
Exon2: 1304-1616
Exon3: 1706-2386

Legend

 = Primer
 = START/STOP codon
 = T → C SNP. Base C found in some tall oil palm
 = TC → T deletion. Deletion found in some tall oil palm
 = Exon

EgExp4 Full Length Sequence

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1      TGAGGGCTAC AATTTTGAAT GATTGGTATC CCTGTGTAGG TGAATATTCA
51     AACTAGAGG CAGTAATAAC AACATACGTA ATATGATAAT TCATGAAAGA
101    TACGATAAAA TTATTGGTGA ATAATTTGTT aAAATAAATC CTTACATCAT
151    TCAAATGATA TTAGGTGATT CAATTATCTA AGAGTAATCT AGAGCATCAT
201    CGAATCAACA CaAAAAAATA TGGCTAACTA GAGAATGCTT CAACAATTCT
251    GAGAACACAA TCATTGCTTA GATTGATAGG CTGATAGAAT ATATATCTTG
301    CTTGAAGGAA AAGATAAGAC CATTAAATTA AGTTTGAGAA CACGGATACT
351    AATCATTAGA TATAACCAAC TAACCTGCCT CATTCCTCAT TACCTAGCAT
401    TCTATGCAAA ATATTGCACT TAAGCCATTA TTTAGGATCT TTGAAAATAT
451    AACATATATA TATAGCTCAT TAATTGCAAT TTTACTTTTc CCCCCAAAAT
501    TAAACACAAT TGCATGCTTC TTCAATGTAA TCTTTACCAA CCATTTGGTA
551    CTTTCATAGT GCACTTAATT GTGCAGTTGT ATAAAGTTCC CTTGATAGCT
601    TAAGTTATAT TAATAATATT ATTATTTGGA ACATGGACAT ATCCACGCCT
651    CCTCTATATC CACATCTATA CTTGGATAGA ATAATTCATA TATATCAATA
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[cont. *EgExp4* Full Length Sequence]

701 TCACATTTAT ATAGCGGTGC TCTCAGAGAA AAAGAAAGAA AGAAATaAAA
751 ATATTTTCGT AGCGGTGGAA AATTGGACCG GGACACGGAG AGAAGATTCC
801 TTGGGAGGAG GTGCATGTGC GTGAGGACCC CAATTGGGCT CAGCTGGTAC
851 TTCACCCAGA ACATTTGCAT GTGCGCTTGA TTTCCATAAT CGCTGCAATC
901 CGTTCCAAGC CTTTGCCCGG GGCCAGCGTG ACAACAACCT CCTTCGTCTC
951 TTTATACTCC TCTCCCCTAT ATATAGCCCT CACCTCCC TC CCCCCCTTCG
1001 CCAACCAAGC AACAAACACC TCCATTCCCT CGTACTCCTC TCCAATGGCG
1051 TCCCCAAAGT TCTCGCTCTC GAACTCCGCC CTCTCCTTCT TCTTCTTTGC
1101 TTCCTTGTGC TTCTTTGCAT CGCAAGCCTT GGGGGACTCC GGATGGCAGA
1151 ACGCACACGC CACGTTCTAC GCGGTGGCG ATGCCTCCGG CACGATGGGT
1201 GAGTCGATTT GTTCTCCGGG ATAACAAGAC TTGGCTCGCT GTTTAATTTA
1251 GCTGCTTGCC AACTTCTCCT CATTGGTGCA AATTGGtTTT TTTTGGTTGC
1301 AGGAGGGGCT TGTGGATATG GCAACCTCTA CAGCCAGGGG TACGGGACCA
1351 ACACCGCGGC CCTCAGCACC GCTCTCTTCA ACAACGGGCT CAGCTGCGGC
1401 TCGTGCTACG AGATGCGGTG CGCTGACGAC CCCAGTGGT GCCTCCAGG
1451 CTCCATCATC GTCACCGCCA CCAATTACTG TCCCCGAAC TACGCCCTCC
1501 CCAACGACAA CGGCGGGTGG TGCAACCCTc CCCGCGAGCA CTTCGACCTC
1551 GCCGAGCCTG CCTTCCTCCA AATTGCCAG TACCGTGCCG GCATCGTCCC
1601 CATCTCCTAC CGTAGGTGAG CATTGTCTAT ATAACCAATC TCTCAAGTCA
1651 TATCTCAAAA GTGATCGACT TTATGAACTG TACTACGTGA TAAATATCTG
1701 GTAGGGTCCC CTGTGTGAAG AAGGGA_gGGG TAAGGTTAC CATCAATGGC
1751 CACTCCTACT TCAACTTGGT TCTCATCACC AATGTCGCTG GGGCCGGAGA
1801 CGTGCATGCG GTGTGATCA AGGGTCCAA CACCGGATGG CAGGCCATGT
1851 CGCGAAACTG GGGCCAGAAT TGGCAGAGCA ATGGCTACCT CAACGGCCAG
1901 AGCCTCTCCT TCCAGGTCAC CTCCAGCGAC GGGAAGACCG TCACCAGCTA

[cont. *EgExp4* Full Length Sequence]

1951 CAACGTCGTG CCGGCCAACT GGCAGTTCGG CCAGACCTTT GAGGGAGAAC
2001 AATTC**TAGGC** CTCCATTGTT AgGGGGGTCT TAAGGGTTTG GGGTTTGGGA
2051 GGATGGCCTC TCTTTGACTT TGAGAGAGGT TTGGGCCTGG TTGAATGCTG
2101 AGGTGGCTTT ATTAGCACCC GCTGAGATGG CCTAAATAGT AGACATATTA
2151 GACATAGATG GTCGTCTTTG TTTCTTGTTG GCAATTTAGA TTGAATGCCT
2201 TGTGGAGATT AAGAAATCAA GGCCTTGGGT GTATAGAATT GGAATCCTCA
2251 ACATATTATA ATATGATTGT GTGGGGGATG GTATGTCAAT TAGAGGAAAG
2301 TATGATGTTT GCTTTGTGTA TTTCAAACAT AATATTTGTA ATCGATTGTT
2351 CTCCAATAAT AATAAGCAAT TTATTAATTG CAGCAATGGA TTGTTCCGTT
2401 ATTATTATAT TAtTTTTTTC TAAGGATCTT CTGACATGGA CCAGAAGCCA
2451 TGTTTGAGGA TTCTATTTGG CCTCAGGAAA AAGATGTGGT CCTTAACCTG
2501 ACCTGTTTGC ACAACAGGTT TGTTCAGTT TGCAACGTGT GATGGATGCT
2551 CGGCATCACA GACTA**ACCA ATCCTGGCAA GATGAC**

\\end of sequence

Fig. S7 The insertion and deletion variations are illustrated on the *EgExp4* reference gene sequence, which has a full-length of 2586 bp (oil palm draft sequences of Malaysian Palm Oil Board (MPOB), (<http://genomsawit.mpob.gov.my/genomsawit/>)).