

### ***EgAPG1* Full length Information**

Length: 2917 bp (Same as report)  
START Codon: 1059-1061 (Checked)  
STOP Codon: 2800-2802 (Checked)  
No variation found between short and tall oil palm

#### BLAST Information

Name: stem-specific protein TSJT1-like [*Elaeis guineensis*]  
Sequence ID: NP\_001306846.1  
Exon 1: Identities 191/260 (73% Match)  
Exon 2: Identities 65/65 (100% Match)

#### Legend

  = Primer  
  = START/STOP codon

### *EgAPG1* Full Length Sequence

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1      tGGCACCTCG ATGTATTTGA GGTCaAAAAA AAGaTAATAC CTCATCAAAA
51     CAAATATAGA GATTGATCCA TCCGATCTAT GATCCAAATC ATCCGAAcCC
101    CGATCACAAT AAGAATcCAT GCAAAcGTTG TATTTAATCA CTCGTTCAtC
151    aTATAGATAT TGAATATTTG CACTaAAAAA AGTAGAACAA AAtTTTTcAT
201    TAATCTAGAT AAaATTTTAG ATTATTATAA TTTATAATGG CAACAGaTGA
251    TTATGAAGTA TCGAAGGGTG TTGCAGCTAg GaTTTTAGTA TCCAAGATAC
301    TATTAGCCTT CTCTATGTTT GTCTGTTTTG TGTTTCTTTC TCCATCTTGT
351    AAAAATaAAA TAAAGGGGCG ATTATGGAGA CAGTCCCGCA GACAGGGCAA
401    GGAATCCAAG AGTGCGATTT ACCGTCGTCT CCGGAAACGG AGGAGGTTGA
451    CGGGGTCTTC TCGGGACGTT AGGAGAAGGA TCGGACCACA CATCGTCCGC
501    CAAAACAAC CCCCGAGTGG GACCCACAGT GGCCTCTTT TTCCTTTGTT
551    TCGTTTTTCT AATTTAATTT TTGCCCTCTC AAGCTAAAAA TATTCCCATC
601    CGCGGGCTGG CAGATGTCGA CGTGGCACCT CGTACACAGA GATATTTTCT
651    TAAACCAGTG GCGGTTAGCG TGGATCCGCG TCAGCGGATA AGTTCTCCAC
701    AGcGGCCTCC CCTTCGTACC ACTGCAGAAA CACCGGATCT GGCCCGATTT
751    ACGGCCCCCA CCCACGAGAC CAAGTCAATT GTGTGACGTA AGGCGTGAAC
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[cont. *EgAPG1* Full Length Sequence]

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801  GGTAACCACA CCCGGAAGTG TTCATATCTC GCATGTCTGG AATAGCTGCG
851  CAATTCTAGC ATGGGGAATA GGGATCCTTA TCCTCCCATC CCTATCCACT
901  TCCACCTCCC AATTGAAAAA ATGTACTACT ATACCACCGG ACACAACTAT
951  ATATACAcCT TCCCTaTCTC TTGCCAAAAC TCCATTCCCC TCCGTTCCCT
1001 TTCCTTCTCC TATTTGCTTT ACTTTTCTTG AGTTTTAGAC GCAGAGAGAA
1051 TAGAGAAGAT GTTGGCGATA TTCCACAAGG CGTTCGCTCA CCCGCCCCAG
1101 GAGCTCAACA GCCCCGGTGG CGGCCGGCGT GTCCCCAAGA ACCCGGAGGA
1151 GATCCTCCGG GAGTTCCACT CCCTCCACCC TGGGGACTCC TTCTCCGCCA
1201 CCTTCAGCGG CGGCGCCGCC CTCGCCTGCG TCCCCTCCCA CTCCAACCAT
1251 TCTCCTCAGC AAAGGCACAG CTTTTTTAtT CCCATATATT CCAGCTTCCA
1301 ATTAAGCATC GCAAATATAT GACACCCTCT GTTTTTATTT GGGGGCAGGT
1351 TGTTCTGTAG CTTTGATGAC ATATATTGTA TGTTCGTGGG GGGACTCGAC
1401 AACTTGTGCT CTCTTATTAG GCAGTACGGG CTAAGCAAGA ACACGAACGA
1451 GGCTTTGCTT GTGATCGAGG CGTACCGGAC GCTGCGCGAC CGCGGCCCGT
1501 ACCCGGCGGA CCAGGTCCTC AAGGACCTCG GCGGCTCCTT CGGCTTCGTG
1551 CTCTACGATA GCAAGGCCGG CACCGTCTTC GCTGCGCTGG TATAAATTTA
1601 TTCTCGGTTT ATTCCGTTTC TTCTTCTTCT TCTTCTTCTT CTTCGTGGCT
1651 GCTGTGGCTG ATGGGGAGTT GTTGTCTTGT tTTTTTGGA TtgGGGtgGG
1701 GTGCAGAGCG CGGATGGaAA GATCCCGCTG TTCTGGGGCA TCGCCGCGGA
1751 TGGATCGGTT GTGATCTGTG ATGATGTGGG GATTATAAAA GGAGGCTGCG
1801 GCAAATCATA CGCTCCTTTc CCAACTGGTA TGtTTTTTTTT TctAAATctT
1851 aTTATTATTA TTATTATTTA AGTTTTAGTA TATGAATATG CTGTAATTAG
1901 TTTAAGATTT ATATGCAAAT CtTaTTATTA TTATTATTAT TATTATGGtT
1951 TTTTAAGTTT TAGTATATGA ATATGCTGTA ATTAGTTTAA GATTTATATG
2001 CAAATCTGTT TTAATTGTAA GAGTATGGAG GGAGGGAAGG AGGAAATTAA
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[cont. *EgAPG1* Full Length Sequence]

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2051 GGCCAAATTA AccttGATTT TGTTACCATA AATATGGCAT ATATAATTAA
2101 TTACTTGAtG GAGAACCATg cCCTGTTTGG TTCCAGCATA CTTTTgGTCTG
2151 GTTAATTTGA ATAGGAGGAA TAAGTTCGGG GCTAGAACAG AGGGATAAAG
2201 CTGACAAAGT CTGGATTAAA TTATTCAACT ATCTTAATCG aAAAAAATA
2251 TTCCGATTAA AGAGGATAAG GTACTaaAAA AAAATTAATC TCAAAAGTAT
2301 GATCCATTAT CTCATTCCA AAAAAGATGC AGAATTAAAC TGAATAAGTC
2351 GGTATTTAAT TATTAATCAA TCACCGGCCA GagGAGTCCC ACATGTTAGA
2401 TCTCgGATCA AATCTAAAC AGAGCCTTCA GTTGAAGCGA ATTGGCATAA
2451 CATAATTATT GGTAATATGA CATGGATGTG ATTCATGTGA TCGAGTGGTA
2501 ACACCCCAAG GGAGATTTGG CAAACTATTA TAATTTCCAT GAATTTGTTC
2551 TTGAGCTCAA ATTACAACAT CAATGTTATA TATTTAATGA CAATATTGGA
2601 TACAGGGTGC ATGTTCCATA GCGAGGGAGG ACTGAAGAGC TTCGAGCATC
2651 CCATGAACAA GCTGAGGCCA ATGCCGAGGG TGGATAGCGA GGGGGTGATG
2701 TGCGGTGctA ACTTCAAGGT CGACACCTAT TCCAGGATTA ACAGCATGCC
2751 ACGAGTCGGC AGCGCCACCA ACTGGACCTT CTGGGACGAA TCCATGTTGt
2801 AGCTTAGCTT TCTACTCTTG GCAACAACAA CAACAACAAG AAACCAATCC
2851 TATCTTAAGT CTGCCTTTCT TCTGCCTCAT CTTCTTTGTT TAAATGGGTT
2901 TCGAGTTCCC TTTGCAG
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\\end of sequence

**Fig. S8** The insertion and deletion variations are illustrated on the *EgAPG1* reference gene sequence, which has a full-length of 2917 bp (oil palm draft sequences of Malaysian Palm Oil Board (MPOB), (<http://genomsawit.mpob.gov.my/genomsawit/>)).