



Fig. S1. Function classification of all unigenes (A) KOG function classification of all unigenes. (B) GO function classification results of the annotated unigenes in *Polygonatum cyrtonema*.

CCGGAGATTGGAATATCCAAAATACAGTACACATCATCAAGGGTAATGGT 50
 CATCTCACCAAAAGGTAAATGGAATGTATTAGTCTCCGGCTGCCACCTCT 100
 CAACAAATGCTGAGACTACTACCTATTGGCATAACCTATAGGAACAATCA 150
 ATAAGGCTCATCAAACCGGATCTCTGAATATAACCCCTCCAGATGAGGTT 200
 GTCTGCAATTGGACTATTGAATCCAAT**TGACC**ATTCTGTGAGTTGGTATG 250
 CATGATTAAGGCATTAAGCAATTCCCCTGGAAAATTAATACAACA 300
 TAAAGTGAATTACAAATTAAATTAAATTAAAGCAAATAATAATTAAATTAT 350
 AATA**TTGACC**AAAATAAATGAAAATCATAATACGTACACTCCCATTCAA 400
 ATCTCTGAGGCAATATGTGCTTGAAACTTCGTAACCTCCTCATGCTCAGATTCAACAG 450
 TGGCCCACCGGAAATGGCCTGTCAACTCCTCATGCTCAGATTCAACAG 500
 CCTGCGCTCTACATTCGCTTACATTAGATGCTCCTCTTGAACG 550
 TTTGGTTGATAACTGGTCATCCTGTACAACCTGTTCTGTCTCTAACTC 600
 TGATATATGAACCTCGTCTGCTGCATCTGCTGCACGTCGGGCTGATGCAG 650
 TCGTTCTTTGTCCTCGAGATGTGCCAGCCTCATCTACAAATTAAATT 700
 AAGATAGTACTGTCAAAAAAATATGATAAATGACTATACAAAATAAGCAT 750
 ACCATGACTTCATATATTATAATTAGTAAACAAAAACAAATATTGTAC 800
 AGTAGAACAAAGAAAAAAATACACATTGAATATTGTGAAAACATTAT 850
 GTAGTAAGAAAAGGGAATAGAACGGAAATGAGTTGGGAGTTCTAGAAAT 900
 TGATAGAGAAAGTCAGTATCTACAGAACGAGAGAGAGTATGAGAACG 950
 TAGCAATGATCATGTGTGACACTGATCATTGCATCATTCAAAACACAAC 1000
 TGATCAATGTATATAGCATAGAGAGAGAGAGAAAACAAAGTGGTAA 1050
 TGTAATGTGAATGTGACTGTCTAGTAAGAGTATAGTGTGAGCTCAAGT 1100
 CAGCTAGCAGCAATATAAACAGCAGTCAGTCGTCGGCCTAAAGAAACCGAC 1150
 CAAATAGTCTTCGTCGGCCTATTAGGCCGACAGATTAATATTGGTCG 1200
 GTCTTAACAGGCCGACCAAATAGTAATCTGTCGGCCTAAATAGACCGACA 1250
 AAAATTAGCCAAGTCGGTTCTCGGGGCCGACCGACTGTCGATGAACAA 1300
 ACGTTACAGAAAGTCAAAAAACTTAATTATGATTATAATCTTAAA 1350
 ACAATACCTTGATTGGTTCGAGAACGACATCTAAAGCGTTGATAGATTCT 1400
 CAAAATGAATATATCCTGAATCAAATTAAAAACAAATCAGTTAACCA 1450
 AATTTTTTCTCCAACTAATAAAATGAAAGAAATCGAATTAGGGTTTT 1500
 CTATTAGGTACAAAGCTATAAAACTACCTAAATCCTGTCTTCTCTC 1550
 TACTCCTCCTACTCTTCTTCACGATCGCTCCTCTCTTCGCGA 1600
 TGGTTGTTCTCTTCTTCGCGTTTTTTTTTTTACAGTCA 1650
 AGTTAATTTTCTACTTGGTGACTGGTTACTGAGCAAATCAAATGG 1700
 GTATTTTGGTATAGATAAAGGGTAAACTGAGCAAATGTTGGGTTGTT 1750
 TTGGTTATGGGTTACTGAGCAAAAATTGGGTGCCAATAGAATTCCCCA 1800
 ATGAGTTTGAATGGGGCTACTGAGCAATTGGGGTTCAAATAGAATT 1850
 ACCCT**ATG**
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 Translation Start Codon

Fig. S2. The sequence and cis elements analysis of *Pcgale1* promoter. The position of nucleotide in the promoter is opposite to the translational start site (ATG) that was marked as +1. W-box cis elements are highlighted as red color.