

## **1574 Molecular Cloning and Expression Analysis of a Cys2/His2 type Zinc Finger Protein Gene in Upland Cotton**

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The zinc finger proteins belong to the largest family of transcription factors. But there are few researches of Cys2/His2 type zinc finger proteins done in cotton and there is no submission of correlating ESTs to GenBank. In this study, a full length of one Cys2/His2 type zinc finger protein (*GZFP*) and its 5' flanking sequence have been acquired by RT-PCR and tail PCR. The full length of the coding region is 804 bp and encodes a polypeptide of 268 amino acids with 40% homology to RBE protein of *Arabidopsis* deposited in the GenBank. It has the conserved zinc finger domain and the leucine rich region at the carboxyl terminus but no intron in the coding region. *GZFP* shows a more expression pattern in floral buds, ovaries, petals and roots than in phloem, xylem, fibers, leaves and seeds by RT-PCR. Analysis of the 5' flanking sequence shows it contains several regulatory elements responsible for pollen and root expression, four core sites required for binding of Dof proteins and four light-regulated elements.