

# CHARACTERISTICS OF DREB1 GENE ISOLATED FROM LOCAL XANHLO-BA BE (BAC KAN) SOYBEAN (GLYCINE MAX (L.) MERRILL) CULTIVAR

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## TÓM TẮT:

Abiotic stresses such as cold, drought and high salinity are common adverse environmental conditions that seriously influence plant growth and crop productivity worldwide. Some transcription factors (TFs) have been isolated and verified recently to play roles under abiotic stresses. Among them, the TF of DREB (Dehydration responsive element binding) can therefore regulate the expression of many stress-inducible genes in plants and play a critical role in improving abiotic stress tolerance of plants by interacting with specific cis-acting element named DRE/CRT, which is present in the promoter region of various abiotic stress-related genes. Li et al (2005) isolated three DREB homologue genes, GmDREBa, GmDREBb and GmDREBc from soybean and showed that each of the deduced proteins contains an AP2 domain of 64 amino acids. Chen et al (2007) isolated a novel DREB homologous gene, GmDREB2 from soybean. Based on its similarity with AP2 domains, they classified GmDREB2 into A-5 subgroup in DREB subfamily in AP2/EREBP family. In this study, we present some results on amplification of DREB1 gene from DNA isolated from soybean cultivar Xanhlo-Babe-Backan in Vietnam via PCR reaction using specific primers DREB1soyF/DREB1soyR, and cloning and sequencing this gene. This gene is 717 bp in length. The PCR products containing the DREB1 fragments were cloned into pBT and sequenced.