Lifeasible Provides Plant Gene Overexpression Service for Research Use

Lifeasible, with decades of experience in plant genetic engineering, addresses the [genetic modification of plants](https://www.lifeasible.com/custom-solutions/plant/plant-genetic-engineering/) through multiple popular genetic engineering technologies. Now the company offers plant gene overexpression service to accommodate research needs.

Gene overexpression refers to cloning a target gene into a vector carrying elements such as a strong promoter and a resistance selection marker, and then introducing it into the plant, so that the host cell will obtain a higher amount of target mRNA transcription level and protein expression level, so that the function of the gene can be studied through analysis such as phenotype. It is suitable for situations where gene function is redundant or lethal after gene knockout.

Gene overexpression has been used as an alternative or additional approach to loss-of-function approaches as well as to confer new functions on plants in order to elucidate plant gene function.

Lifeasible, with cutting-edge facilities and abundant experience, is proud to offer flexible and dependable one-stop [gene overexpression services](https://www.lifeasible.com/custom-solutions/plant/genetically-modified-plants/gene-overexpression-in-plants/) to help accelerate different research needs, including:

**Vector construction with different promoters**

For various needs, a variety of promoters are available at Lifeasible, including those for constitutive (such as p35s, pUbi, pActin1, and pNos), tissue-specific (such as pRBCS for leaves), inducible (such as pCAB for light, pRD29A for stress, and pER for estradiol) expression, and tissue-specific (such as pAP3 for flowers, pGSSP for green tissue).

**Vector construction with diverse fusion protein**

Function investigation of target genes, such as subcellular localization, protein interaction, or directly regulated gene detection, can be carried out using constructs with fused protein GFP, His, GST, MYC, or GR.

**Vector assembly**

[Lifeasible](https://www.lifeasible.com/) also creates technologies for vector assembly with multiple open read fragments (ORFs) for the overexpression of numerous genes.

**Plant transformation**

The majority of transformation systems, including those in monocot species and dicot model plants like rice, wheat, barley, soybean, and Arabidopsis, are covered at Lifeasible.

**Trait measurement and gene function analysis of transgenic plants**

Lifeasible has established a one-stop service platform for plants, please visit <https://www.lifeasible.com/custom-solutions/plant/genetically-modified-plants/gene-overexpression-in-plants/> to know more.