

MUT-4866 rbcL-L290F/rbcS1-L66G

mt+

Cat. No. ALS-04001

Lot. No. (See product label)

Subcategory

Mutants

Description

By employing standard methods, plasmid pSS1-L66G was used to transform rbcL-L290F/rbcS Δ -CAL005.01.13 mt+. The small-subunit L66G substitution suppresses the temperature-conditional phenotype of rbcL-L290F (68-4PP), and increases the CO₂/O₂ specificity and thermal stability of the original large-subunit L290F mutant enzyme. Other small-subunit suppressor substitutions include N54S, A57V, and C65S. This strain has been maintained with acetate medium in darkness to prevent selection for secondary mutations that may improve Rubisco function.

Species

Chlamydomonas

Locus

rbcL, RBCS1

Chromosome

Chloroplast,2

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY