

MUT-4859 rbcL-L290F/rbcS1-WT mt+

Cat. No. ALS-03994

Lot. No. (See product label)

Subcategory

Mutants

Description

This strain was created transforming rbcL-L290F/rbcS Δ -CAL005.01.13 mt+ with the pSS1 plasmid that contains the Rubisco rbcS1 small-subunit gene. Like the original rbcL-L290F mutant, it can grow on minimal medium at 25 °C, but dies on minimal medium at 35 °C. The mutant was created for comparison with rbcL-L290F/rbcS1-L66G mt+. It has been maintained with acetate medium in darkness to prevent selection for secondary mutations that may improve Rubisco function or stability.

Species

Chlamydomonas

Locus

rbcL, RBCS1

Chromosome

Chloroplast,2

Phenotype

Requires acetate at 35 °C; temperature-conditional

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY