

MUT-4844 rbcL-K258R/I265V mt+

Cat. No. ALS-03979

Lot. No. (See product label)

Subcategory

Mutants

Description

Directed mutagenesis and chloroplast transformation of rbcL Δ -25B1 mt+ (MUT-4700) were used to create K258R (AAA-CGT) and I265V (ATT-GTA) substitutions in the Rubisco large subunit, which cause decreases in carboxylation catalytic efficiency and CO₂/O₂ specificity. This is the original mutant strain. It was created to investigate phylogenetic differences near large-subunit residue Leu-290 (see rbcL-L290F). The strain has been maintained with acetate medium in darkness to prevent selection for secondary mutations that may improve Rubisco function.

Species

Chlamydomonas

Locus

rbcL

Chromosome

Chloroplast

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY