

MUT-4746 rbcS1-L18A mt-

Cat. No. ALS-03882

Lot. No. (See product label)

Subcategory

Mutants

Description

Directed mutagenesis and nuclear-gene transformation of rbcS Δ -T60-3 mt- (MUT-4415) were used to create an L18A substitution (CTG-GCC) in the Rubisco small subunit, which causes a decrease in Rubisco holoenzyme stability. This mutant can grow on minimal medium at 25 °C, but dies on minimal medium at 35 °C. The strain has been maintained with acetate medium in darkness to prevent selection for secondary mutations that may improve Rubisco function or stability.

Species

Chlamydomonas

Locus

RBCS1

Chromosome

2

Phenotype

Requires acetate at 35 °C; temperature-conditional

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY