

# MUT-4741 rbcS1-ABGP mt-

Cat. No. ALS-03878

Lot. No. (See product label)

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## Subcategory

Mutants

## Description

Using standard methods of genetic engineering and nuclear-gene transformation of rbcS $\Delta$ -T60-3 mt- (MUT-4690), the betaA-betaB loop of the Chlamydomonas Rubisco small subunit was replaced with the loop from Galdieria partita Rubisco, which causes a decrease in Rubisco holoenzyme stability. The mutant can grow on minimal medium at 25 °C, but dies on minimal medium at 35 °C. This 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

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**FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY**