

MUT-4882 rbcL-I309M mt+

Cat. No. ALS-04017

Lot. No. (See product label)

Subcategory

Mutants

Description

Using standard methods of directed mutagenesis and chloroplast transformation of rbcL Δ -MX3312 mt+ (MUT-4696), an I309M substitution was created in the Rubisco large subunit. This mutant was created to investigate phylogenetic differences in the Rubisco large subunit that may be responsible for pyrenoid formation in algae. See also rbcL-R32K/A222S/C247S and rbcL-R32K/V145C/P210S/A222S/I225L/C247S/I309M. An I309M substitution in plant Rubisco alters carboxylation catalytic efficiency. 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

Chromosome

Chloroplast

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