

MUT-5036 rbcL-AG341 mt+

Cat. No. ALS-04113

Lot. No. (See product label)

Subcategory

Mutants

Description

Using standard methods of directed mutagenesis and chloroplast transformation of rbcL Δ -MX3312 mt+ (MUT-4696), 12 substitutions (G168P, R305K, L326I, V341I, M349L, M375L, A398S, C399V, D470E, T471A, I472M, and K474T) together in the Rubisco large subunit were created. This mutant (also named AG341) represents one of 15 "associated groups" of amino acids that differ between Chlamydomonas and land plants. It was created to investigate phylogenetic differences that influence Rubisco catalysis. The mutant strain has a small decrease in Rubisco holoenzyme. It 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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