

MUT-4937 rbcL-P151A mt+

Cat. No. ALS-04072

Lot. No. (See product label)

Subcategory

Mutants

Description

Using standard methods of directed mutagenesis and chloroplast transformation of rbcL Δ -MX3312 mt+ (MUT-4696), a P151A substitution (CCT-GCT) was created in the Rubisco large subunit. Because Pro-151 is hydroxylated, this mutant was created to investigate the role of the modified residue in Rubisco structure or function. The P151A substitution causes a decrease in Rubisco CO₂/O₂ specificity, but does not affect the photosynthetic growth of the mutant cells. 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

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY