

# MUT-4829 rbcL-D473E mt+

Cat. No. ALS-03965

Lot. No. (See product label)

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## Subcategory

Mutants

## Description

Directed mutagenesis and chloroplast transformation of rbcL $\Delta$ -MX3312 mt+ (MUT-4696) were used to create a D473E substitution (GAC-GAA) in the Rubisco large subunit, which causes a decrease in Rubisco CO<sub>2</sub>/O<sub>2</sub> specificity but not holoenzyme stability. The x-ray crystal structure of the mutant protein has been solved. This is the original mutant strain. It was created due to a previous study of the role of Asp-473 in catalysis. The 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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**FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY**