

# MUT-4851 rbcL-L290F/rbcS2-N54S pf2 mt- (R116-1B revertant of 68-4PP) (pf2 progeny used for genetic analysis)

*Cat. No.* ALS-03986

*Lot. No.* (See product label)

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## Subcategory

Mutants

## Description

R116-1B was recovered as a photosynthesis-competent revertant after methyl-methanesulfonate mutagenesis of rbcL-L290F mt+ (68-4PP). It results from a mutation in rbcS2 that causes an N54S substitution (AAC-AGC) in the Rubisco small subunit, which increases the CO<sub>2</sub>/O<sub>2</sub> specificity of the original mutant enzyme. Gene-centromere mapping indicated that rbcS2 is 20 map units from its centromere. This strain was recovered from a cross between the original revertant R116-1B mt+ and pf2 mt-. It has been maintained with acetate medium in darkness to prevent selection for secondary mutations that may improve Rubisco function.

## Species

Chlamydomonas

## Locus

rbcL, RBCS2, PF2

## Chromosome

Chloroplast,2,11

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**FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY**