

MUT-5717 polq1 [line #3]

Cat. No. ALS-04707

Lot. No. (See product label)

Subcategory

Mutants

Description

Knock-out of polq1 (Cre16.g664301) in MUT-1883, resulting in deficiency of alternative end-joining (alt-EJ) DNA repair. One of three polq1 lines deposited (MUT-5715, MUT-5716, MUT-5717). Knock-out generated using CRISPR/Cas12a and the 1.8 kb aphVIII antibiotic selection marker to disrupt the gene of interest, resulting in paromomycin resistance (paroR). Alt-EJ deficiency was confirmed by hypersensitivity to the DNA-damaging agent zeocin, and the knock-out locus was sequence-verified. No off-target analysis was performed; may contain off-target edits and aphVIII integrations. Up to 10% DMSO may be added to the PCR to help amplify long GC-rich amplicons, in which case lower annealing temperatures by 3-5 °C. Deposited as part of 21 lines containing eight different DNA repair mutant genotypes (MUT-5701 to MUT-5721). Note: this line has a 9 bp deletion at the polq1 locus, so it harbours at least one off-target aphVIII insertion elsewhere in the genome since it is paromomycin resistant.

Species

Chlamydomonas

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY