

pHR18

Cat. No. ALRK-03287

Lot. No. (See product label)

Description

Total insert size is 9,093 bp. This plasmid represents one half of the pair of plasmids designed to detect homologous recombination in *C. reinhardtii*. Upon recombination with its partner, pHR23, it will produce an intact, functional hygromycin resistance cassette. pHR18 is the plasmid that has been transformed into MUT-1820 to create the strain B12. Selection: Ampicillin resistant in *E. coli*; restores arginine prototrophy in *arg7* *Chlamydomonas* mutants.

Insert

This construct contains two intact cassettes and one truncated cassette. The first intact cassette is the ARS2 coding sequence, driven by the chimeric HSP70-RBCS2 promoter and followed by its endogenous 3' UTR; the CDS and 3' UTR were amplified from cDNA harvested from a strain under sulfur starvation conditions. The second intact cassette is the ARG7 CDS, surrounded by its endogenous promoter/5' UTR and 3' UTR, which were amplified from genomic DNA of wild type CC1010 strain. The final, truncated cassette contains the 3' half of the CDS of hygromycin resistance gene followed by the RBCS2 3' UTR; upstream of this lies a 1.6 kb intron that was amplified from CC1010 genomic DNA.

Vector

pBluescript

Bacterial Host Strain

DH5 alpha

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