

pHR23

Cat. No. ALRK-03288

Lot. No. (See product label)

Description

Total insert size is 8,847 bp. This plasmid represents one half of the pair of plasmids designed to detect homologous recombination in *C. reinhardtii*. Upon recombination with its partner, pHR18, it will produce an intact, functional hygromycin resistance cassette. pHR23 can be transformed directly into strain B12, which already harbors pHR18 in its genome, to screen for homologous recombination rate. Paromomycin resistance can be used to assess the ratio of recombinants to total transformation efficiency. Selection: Ampicillin resistant in *E. coli*; paromomycin resistant in *Chlamydomonas*.

Insert

This plasmid contains 4,360 bp of homology to its complementing partner, pHR18, followed by one intact cassette for paromomycin resistance and one truncated cassette. The truncated cassette contains the 5' half of the hygromycin resistance CDS, preceded by the beta-tubulin promoter and 5' UTR, followed by a 1.6 kb intron amplified from wild type strain MUT-1010 genomic DNA.

Vector

pBluescript

Bacterial Host Strain

DH5 alpha

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY