

Determination of pombe mating type by PCR

Using mat1-P and mat1-M specific primers, it is possible to determine the mating type of a strain even if it is sterile. With common primer MT1, the mat1-P specific primer MP or mat1-M specific primer MM produces a characteristic PCR product, 987bp or 729bp respectively. h⁺/h⁻ diploid cells or h90 cells give both bands. The sequence of the primers are:

MT1(738)	AGAAGAGAGAGTAGTTGAAG
MP739	ACGGTAGTCATCGGTCTTCC
MM740	TACGTTCAGTAGACGTAGTG

Procedure

20 ul megamix blue
1 ul MT1 (20 uM)
1 ul MP or MM (20 uM)
yeast cells

LAPCR program