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An international project is replacing each yeast open reading frame (ORF) with a drug-resistance cassette containing two 20-mer oligonucleotide 'barcodes' that can be used as hybridization tags for each gene. In the November 8 Sciencexpress, Ooi *et al.* describe the use of this resource to screen for mutants defective in nonhomologous end-joining (NHEJ) (10.1126/science.1065672). They used a transformation-based plasmid-repair assay to screen for NHEJ activity. They prepared haploid and homozygous diploid deletion pools which were then transformed with circular or linearized plasmids. Ooi *et al.* hybridized DNA isolated from the pools to microarrays containing the barcode tags, and thus identified known and novel genes associated with the NHEJ pathway. This study highlights the effective application of hybridization barcode tags to screen pools of thousands of mutants in parallel.

References

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