
Amersham Ready-To-Go RAPD Analysis Beads



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- For performing DNA profiling experiments using the randomly amplified polymorphic DNA [RAPD (1)] technique.
- Preformulated, predispensed, single-dose reaction beads are provided as ambient-temperature-stable beads to ensure greater reproducibility between reactions, minimize pipetting steps and reduce the potential for pipetting errors and contamination.
- RAPD* reactions are simple to perform—simply add genomic DNA solution and primer to a tube of RAPD Analysis Beads to a final reaction volume of 25 µl and cycle the reaction.
- Each lot of RAPD Analysis Beads is function-tested to ensure its ability to generate a differential banding pattern between the two control *E. coli* strains using RAPD Analysis Primer 2 included with the RAPD beads.
- RAPD reactions are pre-optimized for use with a wide variety of organisms.

Ready-To-Go RAPD Analysis Beads are designed as premixed, predispensed reactions for performing random amplified polymorphic DNA (RAPD) analysis. With RAPD analysis, genomic polymorphisms can be detected at multiple loci using only nanogram quantities of DNA. The RAPD reactions are provided as room-temperature-stable dried beads that contain all the necessary reagents, except primer, for performing RAPD analysis.

RAPD analysis is a technique for rapidly detecting genomic polymorphisms. A single, short oligonucleotide primer of arbitrary sequence is used under low stringency conditions in PCR to generate a reproducible array of strain-specific products that are analyzed by gel electrophoresis. Under these conditions, genomic polymorphisms can be detected at multiple loci using only nanogram quantities of DNA. RAPD analysis has been used in numerous applications, including gene mapping, detection of strain diversity, population analysis, epidemiology and the analysis of phylogenetic and taxonomic relationships (2).

The RAPD reactions are provided as dried beads that contain all the necessary PCR components, except primer, in concentrations optimized for RAPD analysis. Beads are provided in thin-walled 0.5 ml tubes compatible with most thermal cyclers. Each package of Ready-To-Go RAPD Analysis Beads contains sufficient reagents for 100 individual RAPD reactions: RAPD analysis beads, control *E. coli* BL21 DNA, control *E. coli* C1a DNA, RAPD analysis primer 2, and instruction booklet (DNA from two *E. coli* strains and RAPD analysis primer 2 are provided as controls to assay the ability of the RAPD beads to amplify DNA and identify polymorphisms).

RAPD Analysis Kit consists of Ready-To-Go RAPD Analysis Beads and six primers that can be used with RAPD Analysis Beads. Each primer in the set is an arbitrary 10-mer that is specifically designed for use in RAPD analysis. The primers are supplied lyophilized and can be reconstituted with 500 µl of sterile distilled water to give a final concentration of 5 pmol/µl.

References

1. Williams, J. G. et al. Nucl. Acids Res. 18, 6531 (1990). 2. Welsh, J. et al. PCR 2: A Practical Approach, McPherson, M. J., Hames. B. D. and Taylor, G. R., eds., Chapter 11, IRL Press (1995).

Product Specifications

Amersham Ready-To-Go RAPD Analysis Beads 

Parameter	Amersham Ready-To-Go RAPD Analysis Beads
Number of Tests	100 reactions
Kit contents	RAPD Analysis Beads: Room-temperature-stable bead containing buffer, dAT P, dCTP, dGTP, dTTP, BSA, thermostable DNA polymerases; Control E. coli BL21(DE3) DNA: 1 µg of E. coli BL21(DE3) DNA; lyophilized; Control E. coli C1a DNA: 1 µg of E. coli C1a DNA; lyophilized; RAPD Analysis Primer 2: 2.5 nmol of lyophilized primer (5'-d[GTTTCGCTCC]-3')
Color	Colorless
Licensing	For licensing information, see the Licensing Statements page in the About Us section.

Parameter**Amersham Ready-To-Go RAPD Analysis Beads**

pH

8.3

Physical state

Solid

Solubility

Soluble in cold water and hot water

Pack size

100 reactions