

The CNRGV also produces macroarrays (high-density filters of bacterial clones).

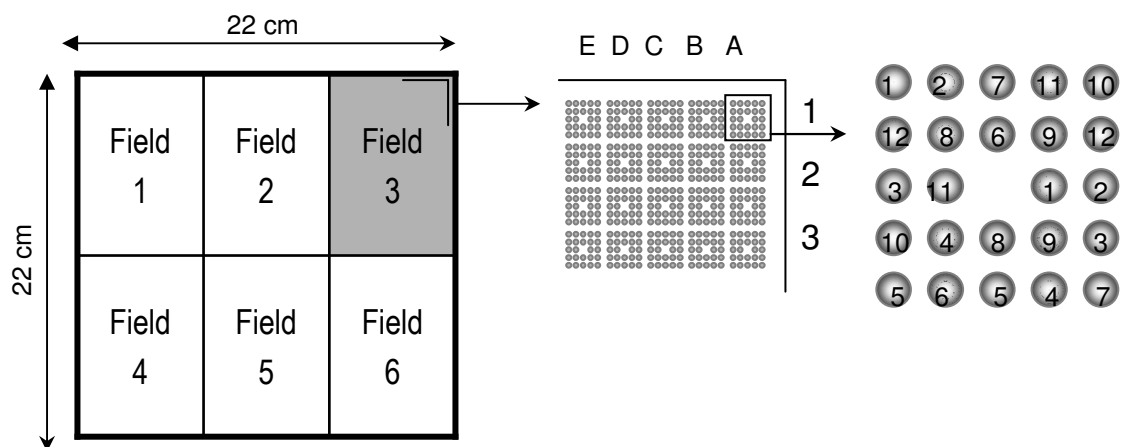
Macroarrays are essential tools for the exhaustive structural and functional study of genomes, and allow the identification of sequences of interest among thousands of clones.

Procedure

The macroarrays are produced with a high-throughput machine (Q-Bot), which deposits thousands of BAC or cDNA clones on a nylon membrane (or filter).

We produce membranes with various densities of clones (from 2304 to 55296 clones). According to your needs, we can deposit clones singly or in duplicate, according to a 2x2, 3x3, 4x4 or 5x5 pattern.

Example of deposition in duplicate according to a 5x5 pattern:



Macroarrays

- Each filter is divided in 6 fields
- 72 384-wells microplates are gridded per filter
- = 27 648 clones in duplicate

= Each 5*5 pattern follows a 384-well microplate organization (24 columns by 16 rows).

5*5 Pattern

12 384-well microplates are gridded per field
=4608 clones in duplicate

Application

Macroarrays can be hybridised with radioactive or non-radioactive probes. We have shown that these membranes can be hybridised five times in the conditions used at the CNRGV, with reliable results obtained in each case.

Quality control

The quality of each batch of membranes produced is checked by hybridization with control probes before distribution to the client. The traceability of all manipulations is ensured by a computerized system. Documentation describing the characteristics of the collection spotted, the layout of the spots on the macroarray and the procedure for macroarray hybridization is enclosed with each dispatch.

Service request

All requests for the production of macroarrays containing clones from the libraries available from the CNRGV or from other specific libraries may be formulated via our website.

Depending on your request, we will propose solutions adapted to your particular needs:

<http://cnrgv.toulouse.inra.fr/>