



# Chromosome microdissection and cloning : a practical guide

/

Hagag, Nabil G.  
Viola, Michael V.

Academic Press,  
1993

[Laboratory Manual](#) [Electronic books](#)

Monografía

<https://rebiunoda.pro.baratznet.cloud:38443/OpacDiscovery/public/catalog/detail/b2FpOmNlbGVicmF0aW9uOmVzLmJhcmF0ei5yZW4vMjYwNDcxMzY>

---

**Título:** Chromosome microdissection and cloning a practical guide [edited by] Nabil G. Hagig and Michael V. Viola

**Editorial:** San Diego Academic Press 1993

**Descripción física:** 1 online resource (x, 160 pages) illustrations

**Tipo Audiovisual:** Chromosomes Analysis

**Bibliografía:** Includes bibliographical references and index

**Contenido:** Introduction to chromosome microdissection -- Chromosome organization -- Cloning DNA from chromosome fragments -- Preparation of chromosomes for microdissection -- Critical aspects of chromosome preparation -- Enrichment of metaphase spreads -- Hypotonic treatment -- Chromosome fixing and spreading -- Aging, storing, and staining of metaphase spreads -- Reagents -- Equipment -- Protocols -- Protocol 1. Preparation of chromosomes from peripheral blood T lymphocytes (whole blood microculture method) -- Protocol 2. Preparation of chromosomes from monolayer tissue culture cell lines -- Protocol 3. Preparation of chromosomes from monolayer cells grown on coverslips -- Protocol 4. Preparation of chromosomes from dipteran salivary glands -- Protocol 5. Solid staining and GTG banding of metaphase chromosomes -- Methods of chromosome microdissection -- Methods -- Video microscope method -- Oil chamber method -- Laser microdissection method -- Summary of chromosome microdissection and collection for DNA cloning -- Reagents and equipment -- Protocol (cont) Molecular cloning of microdissected chromosomal DNA -- Cloning of DNA from microdissected chromosomal DNA fragments -- Method 1. Direct cloning of DNA from microdissected chromosomal fragments -- Direct cloning into [gamma] phage -- Method 2. Ligation of microdissected chromosomal DNA with plasmid vector or linker-adaptor and PCR amplification -- Protocol 2.1. Ligation of microdissected DNA with plasmid vector, PCR amplification, and cloning -- Protocol 2.2. Ligation of microdissected DNA with linker-adaptor, PCR amplification, and cloning -- Method 3. PCR amplification of microdissected chromosomal DNA fragments followed by probing

a complete recombinant library -- Protocol 3.1. Preparation of chromosomal DNA for amplification -- Protocol 3.2. PCR amplification of microdissected chromosomal DNA using "universal" primers -- Protocol 3.3. PCR amplification using human Alu sequence-based primers -- Analysis of recombinant clones derived from microdissected chromosomal DNA -- Determination of DNA insert size range -- Determination of the percentage of recombinant clones containing repeat and unique sequences (cont) Protocol 4.1. Assay for repeat sequences -- Protocol 4.2. Assay for unique sequences -- Calculation of the percentage of total microdissected DNA cloned -- Determination of potential structural gene sequences -- Localization of recombinant clones using *in situ* hybridization -- Protocol 5.1. DNA probe labeling for fluorescence *in situ* hybridization -- Protocol 5.2. Fluorescent *in situ* hybridization to metaphase chromosome spreads -- Applications of chromosome microdissection -- Direct analysis of the PCR product of microdissected chromosome fragments -- Gene mapping -- Mapping sites of chromosome rearrangement and deletions -- Determination of coupling phase -- Recombinant DNA libraries generated from microdissected chromosome fragments -- Genetic analysis of specialized chromosome structures -- Applications in genomic sequencing projects -- Characterization of disease-related genetic loci -- Study of chromosome abnormalities in cancer cells -- Gene transfer using chromosome fragments

**Restricciones de acceso:** Use copy. Restrictions unspecified star. MiAaHDL

**Detalles del sistema:** Master and use copy. Digital master created according to Benchmark for Faithful Digital Reproductions of Monographs and Serials, Version 1. Digital Library Federation, December 2002. <http://purl.oclc.org/DLF/benchrepro0212> MiAaHDL

**Nota de acción:** digitized 2010 HathiTrust Digital Library committed to preserve pda MiAaHDL

**Copyright/Depósito Legal:** 643888121 842859981 974618009 974669495 987731272 988556507

**ISBN:** 1299193684 ebk) 9781299193680 ebk) 9780123133205 0123133203

**Materia:** Molecular cloning- Technique Microdissection Chromosomes Chromosomes- ultrastructure- Laboratory Manuals Cloning, Molecular- methods- Laboratory Manuals Dissection- methods- Laboratory Manuals Chromosomes. Microdissection. Molecular cloning- Technique. Chromosom. Mikromanipulator.

**Autores:** Hagag, Nabil G. Viola, Michael V.

**Enlace a formato físico adicional:** Print version Chromosome microdissection and cloning. San Diego : Academic Press, 1993 (DLC) 93007286 (OCO LC)27816787

---

## Baratz Innovación Documental

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- [informa@baratz.es](mailto:informa@baratz.es)