MIT Department of Biology

7.013: Introductory Biology - Spring 2005

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7.013 Spring 2005 Recombinant DNA terms

Recombinant DNA - Terms to know

Polymerase Chain Reaction (PCR)

DNA Sequencing: dideoxy chain termination – end label and fluorescent dideoxy

methods

Genotyping

SNPs

Polymorphisms (RFLP)

Gene therapy (ex-vivo and in-vivo)

Retroviral vector

Genetically engineered animal models

Gene targeting

Knock-out mice

Transgenic mice

Promoter

Plasmid

Origin of Replication (ORI)

Drug resistance (e.g. Amp)

Multiple cloning site

Restriction enzyme

Hybridization

Cloning by complementation

Oligonucleotide probe/primer

Precursor RNA

mRNA

splicing

DNA polymerase (Taq)

Reverse Transcriptase (RT)

Library (cDNA, genomic)

Hybridization

Anneal

Transformation

Bacterial colonies

Ligation

DNA ligase

Denaturation

Agarose Gel Electrophoresis

Genetic Engineering

Cloning

Recombinant DNA revolution

DNA fragment

Palindrome

Sticky ends

Blunt ends

EcoRI recognition sequence

DNA amplification