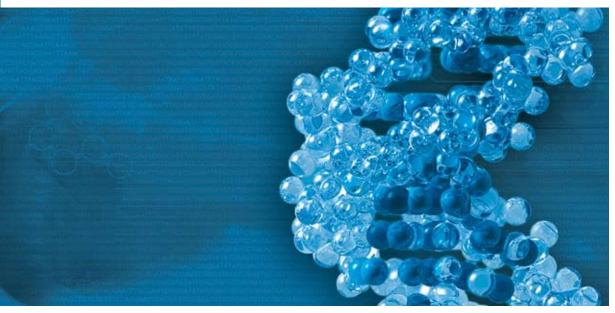
# **DNA** Analysis



Life Science Research
DNA Analysis



# **DNA** Analysis



## **Description**

Vector or plasmid production: Vector design and construction **Genotyping, strain typing:** DNA isolation and purification from tissues, cell cultures, or bacterial cells

**Vector or plasmid production:** Recombinant DNA purification from host

### **Applications**

Genotyping Vector or plasmid production Strain typing

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## **Technologies**

Nucleic acid electrophoresis Image analysis PCR Nucleic acid sample preparation Spectrophotometry and fluorometry Automated nucleic acid electrophoresis

#### **Related Products**









Wide mini ReadySub-Cell™ GT cell
ReadyAgarose™ 96 Plus gels
Molecular Imager® Gel Doc™ XR system
Quantity One® 1-D analysis software
Ethidium bromide











#### Genotyping

Quantum Prep® plasmid miniprep kit AquaPure™ genomic DNA isolation kit Chelex® 100 resin

#### **Vector or Plasmid Production**

Quantum Prep plasmid miniprep kit

AquaPure genomic DNA isolation kit

SmartSpec<sup>™</sup> Plus spectrophotometer

Experion<sup>™</sup> automated electrophoresis system





## Detection and **Analysis**

Genotyping: Electrophoresis and further

characterization, including specific mutation analysis, SNP mapping, and strain typing

**Genotype** or Vector

Genotyping: Amplification of specific gene targets

Vector or plasmid production: Validation of construct by mutation detection and/or sequence analysis







**PCR** Nucleic acid electrophoresis Quantitative PCR (qPCR)

Nucleic acid sequencing

Gel drying

Mutation analysis



Nucleic acid blotting

Multiplex suspension

Spectrophotometry and fluorometry

Data analysis and bioinformatics













#### Genotyping

MiniOpticon™ real-time PCR system MyiQ<sup>™</sup> single-color real-time PCR system iQ<sup>™</sup>5 multicolor real-time PCR system iQ™ supermix

#### **Vector or Plasmid Production**

Sequi-Gen® GT system PowerPac<sup>™</sup> HV power supply Model 583 and HydroTech™ gel drying systems

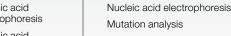


Image analysis

array technology - nucleic acid

**ELISA** 











CHEF Mapper® XA system DCode<sup>™</sup> system for DGGE ReadyAgarose 96 Plus gels Molecular Imager Gel Doc XR system EZ Load™ HT molecular markers VersaFluor<sup>™</sup> fluorometer Quantity One 1-D analysis software Bio-Plex® 200 system with HTF Benchmark<sup>™</sup> Plus microplate spectrophotometer system

The search for mutations in genomic DNA is important in the study of genetic factors involved in the development of cancer, as well as in a variety of single- and multiplegene disorders. DNA polymorphisms are useful tools for ecological and evolutionary studies of terrestrial, marine, and microbial organisms, with applications ranging from species identification to delineation of population structure and monitoring of genetic diversity. Bio-Rad has a long history of providing high-quality reagents, devices, and software for highresolution analysis of DNA, as well as expert support and protocol development tools.

For a complete list of products and related product information, refer to the 2006/2007 catalog, visit us on the Web at **www.bio-rad.com**, or contact your local Bio-Rad representative.

#### **Ordering Information**

Catalog #	Description	Catalog #	Description
Construction		Detection and	d Analysis
170-4489	Wide Mini ReadySub-Cell GT Cell, includes	Varies	CHEF Mapper XA Chiller System
	buffer tank, lid and electrodes, leveling bubble;	Varies	CHEF-DR® III System
	accommodates 20-well, 32-well, and 2 x 32-well wide	170-9080	DCode System for DGGE, 120 V, for 16 cm gels with
	mini ReadyAgarose gels		single prep well (1 mm), includes comb gasket, 2 sets
Varies	ReadyAgarose 96 Plus Gels, TBE, plus ethidium		of clamps, Model 475 gradient former, all parts required
	bromide, 4 x 26-well (96 plus)		to cast gradient gels
Varies	ReadyAgarose 96 Plus Gels, TAE	170-9081	DCode System for DGGE, 220/240 V, for 16 cm gels
170-8170	Molecular Imager Gel Doc XR System, PC		with single prep well (1 mm)
170-8171	Molecular Imager Gel Doc XR System, Mac	170-9082	DCode System for DGGE, 100 V, for 16 cm gels with
170-9600	Quantity One 1-D Analysis Software		single prep well (1 mm)
161-0433	Ethidium Bromide Solution, 10 mg/ml, 10 ml	170-9083	DCode System for DGGE, 120 V, for 10 cm gels with
161-0430	Ethidium Bromide Tablets, 10 x 10 mg		2 prep wells (1 mm)
161-0786	Bio-Safe <sup>™</sup> Coomassie Stain, 1 L	170-9084	DCode System for DGGE, 220/240 V, for 10 cm gels
170-9703	MyCycler Thermal Cycler System		with 2 prep wells (1 mm)
Sample Prepa	eration	170-9085	DCode System for DGGE, 100 V, for 10 cm gels with
732-6100	Quantum Prep Plasmid Miniprep Kit, 100 preps		2 prep wells (1 mm)
732-6340	AquaPure Genomic DNA Isolation Kit, for cultured	164-5050	PowerPac Basic Power Supply
	cells and gram-negative bacteria	170-8361	EZ Load HT Molecular Marker, 100 bp-2 kb,
142-1253	Chelex 100 Resin, molecular biology grade, 50 g		160 applications
170-2525	SmartSpec Plus Spectrophotometer	170-8362	EZ Load HT Molecular Marker, 500 bp-10 kb,
700-7060	Experion System With Computer and Monitor		160 applications
Validation		165-5003	Model 185 Vacuum Blotter Basic Unit
CFB-3120	MiniOpticon Real-Time PCR System, includes optical	170-2402	VersaFluor Fluorometer, includes standard cuvette
	housing, MJ Mini thermal cycler, analysis software		holder, 100 standard cuvettes, choice of 1 excitation and 1 emission filter
170-9770	MyiQ Single-Color Real-Time PCR Detection	170-9610	Quantity One Version Upgrade
	System, includes iCycler base, optics module,	170-9612	Quantity One Version opprade  Quantity One User Guide
	software CD-ROM, 96-well optical reaction module,	170-9615	Quantity One CFR Module
	optical-quality 96-well PCR plates, Microseal 'B'	170-9300	FPQuest™ Software
	seals, communication cables, power cords, instructions	171-000201	Bio-Plex 200 System
170-9780	iQ5 Multicolor Real-Time PCR Detection System,	171-000205	Bio-Plex 200 System With HTF, includes
	includes iCycler base, optics module, software		high-throughput fluidics (HTF)
	CD-ROM, 5 installed filter sets, 96-well reaction	170-6930	Benchmark Plus Microplate Spectrophotometer
	module, calibration solutions, optical-quality 96-well		System, PC, with temperature control, power cord,
	PCR plates, Microseal 'B' seals, communication		serial cable, Microplate Manager software, instructions
170 0000	cables, power cord, quick reference cards, instructions	170-6935	Benchmark Plus Microplate Spectrophotometer
170-8860 165-3802	iQ Supermix, 100 x 50 μl reactions Sequi-Gen GT System and PowerPac HV		System, PC, without temperature control
100-3002	Power Supply, 21 x 40 cm	Coomassia is a	trademark of BASF Aktiengesellschaft.
165-3803	Sequi-Gen GT System and PowerPac HV		
100 0000	Power Supply, 21 x 50 cm		time thermal cyclers are licensed real-time thermal cyclers
165-3804	Sequi-Gen GT System and PowerPac HV		s United States Patent No. 6,814,934 B1 for use in
	Power Supply, 38 x 50 cm		or all other fields except the fields of human diagnostics
165-3810	Segui-Gen GT System and PowerPac HV	and veterinary of	
	Power Supply, 38 x 30 cm		uspension array system includes fluorescently labeled
164-5056	PowerPac HV Power Supply	microspheres and instrumentation licensed to Bio-Rad Laboratories, Inc.	
165-1745	Model 583 Gel Dryer, 100/120 V	by the Luminex Corporation.	
165-1746	Model 583 Gel Dryer, 220/240 V	CHEF (U.S. Patent 5,549,796, issued to Stanford University) is	
165-1789	HydroTech Gel Drying System, 100/120 V, includes	exclusively licensed to Bio-Rad Laboratories, Inc.	
	Model 583 gel dryer, HydroTech vacuum pump,	DR technology	is covered by U.S. Patent 4,878,008, issued to Bio-Rad
	instructions	Laboratories, In	
165-1790	HydroTech Gel Drying System, 220/240 V		



Bio-Rad Laboratories, Inc.

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