

# Product Catalog



POLYMERASES  
MASTER MIXES  
NUCLEOTIDES  
REVERSE TRANSCRIPTION  
DNA MARKER  
PURIFICATION  
SPECIAL ENZYMES  
CHEMICALS  
DEVICES

**New  
Edition  
2018**

**New Product:  
WGA Kit**

see page 7

**New Product:  
Lyophilized Master Mixes**









see page 9

**Now featuring:  
BIORON Realline Cyclers**

see page 19

**BIORON**  
life science



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BIORON GmbH is a producer and worldwide acting trader of molecular biological and diagnostic products since 2002. Our products cover a wide range of enzymes and products for PCR, like a great variety of nucleotides and DNA ladders, customised Master Mixes, polymerases and kits for purification of nucleic acids.

Our customers are distributors, hospitals, diagnostic labs, research institutes and biotech companies. We are experienced in OEM- and tender business.

BIORON has a long tradition to support our customers projects. We supply ready-to-use solutions. Our customers value us for our personalised support.

Products from BIORON GmbH fulfil highest quality. We are working according to ISO13485 standard.



## BIORON's DNA Polymerases: General overview

BIORON offers a wide range of polymerases for various applications.

DNA Polymerases	PCR-Application	HotStart	Proof reading	5'3'Exon. Activity	Ref No	Pack Size
<b>DFS Taq 5 U/μl</b>	<ul style="list-style-type: none"> <li>Standard</li> <li>Real-Time</li> <li>Pathogen detection</li> </ul>	No	No	Yes	101005	500 U
					101025	2500 U
					101100	10000 U
<b>DFS HotTaq 5 U/μl</b>	<ul style="list-style-type: none"> <li>Standard</li> <li>Real-Time</li> <li>Multiplex</li> <li>Pathogen detection</li> </ul>	Yes (antibody)	No	Yes	101004	500 U
					101024	2500 U
<b>High Taq 5 U/μl</b>	<ul style="list-style-type: none"> <li>Standard</li> <li>Real-Time</li> <li>Pathogen detection</li> </ul>	No	No	Yes	111105	500 U
					111125	2500 U
<b>High Taq HC 75 U/μl</b>	<ul style="list-style-type: none"> <li>Standard</li> <li>Real-Time</li> <li>Pathogen detection</li> <li>Lyophilisation</li> </ul>	No	No	Yes	111106	1000 U
<b>SuperHotTaq 5 U/μl</b>	<ul style="list-style-type: none"> <li>Standard</li> <li>Multiplex</li> <li>Real-Time</li> </ul>	Yes (antibody)	No	Yes	119002	200 U
					119010	1000 U
<b>SuperHotTaq HC 30 U/μl</b>	<ul style="list-style-type: none"> <li>Standard</li> <li>Real-Time</li> <li>Multiplex</li> <li>Lyophilisation</li> </ul>	Yes (antibody)	No	Yes	119010HC	2000 U
<b>SuperHotTaq glycerol free 25 U/μl</b>					119020GF	2000 U
<b>AptaHotTaq 5 U/μl</b>	<ul style="list-style-type: none"> <li>Standard</li> <li>Real-Time</li> </ul>	Yes (aptamer)	No	Yes	119602	200 U
<b>AptaHotTaq 30 U/μl</b>					119610	1000 U
					119630	2000 U
<b>PureHotTaq 5 U/μl</b>	<ul style="list-style-type: none"> <li>Standard</li> <li>Real-Time</li> <li>Multiplex</li> <li>Diagnostic use</li> </ul>	Yes (chemical)	No	Yes	119002CM	200 U
					119010CM	1000 U
<b>Tth 5 U/μl</b>	<ul style="list-style-type: none"> <li>Reverse Transcription</li> <li>Multiplex</li> </ul>	No	No	Yes	104005	500 U
					104025	2500 U
<b>Sequencing Taq 5 U/μl</b>	(Cycle) Sequencing	No	No	No	117005	500 U
					117025	2500 U
<b>DF-Pfu 5 U/μl</b>	High fidelity	No	Yes	No	108105	500 U
					108125	2500 U

DNA Polymerases	PCR-Application	HotStart	Proof reading	5'3'Exon. Activity	Ref No	Pack Size
<b>Klen SNPase 25 U/μl</b>	<ul style="list-style-type: none"> <li>SNP analysis</li> <li>Mini &amp; DNA sequencing</li> </ul>	No	No	No	108205	500 U
					108225	2500 U
<b>SNPase HotStart 20 U/μl</b>	<ul style="list-style-type: none"> <li>SNP analysis</li> <li>Mini &amp; DNA sequencing</li> <li>High fidelity</li> </ul>	Yes (antibody)	No	No	108210	500 U
					108250	2500 U
<b>SD Polymerase 10 U/μl</b>	<ul style="list-style-type: none"> <li>Isothermal Amplifikation</li> <li>Strand displacement (LAMP<sup>1</sup>, WGA<sup>2</sup>, RCA<sup>3</sup>, MDA<sup>4</sup>)</li> <li>PCDR<sup>5</sup></li> <li>Standard</li> <li>Multiplex</li> <li>Long Range</li> </ul>	No	No	No	108702	200 U
					108710	1000 U
<b>SD Polymerase 50 U/μl</b>					108800	1000 U
					108850	5000 U
<b>SD Polymerase HotStart 10 U/μl</b>		Yes (antibody)	No	No	108902	200 U
					108910	1000 U
<b>One Step WGA Kit</b>	<ul style="list-style-type: none"> <li>Single Cell DNA analysis</li> <li>NGS</li> <li>SNP Genotyping</li> <li>qPCR Mutation detection</li> <li>STR and RFLP analysis</li> <li>Array technologies</li> </ul>	No	No	No	108725	25 rcs
					108750	50 rcs

<sup>1</sup> Loop Mediated Amplifikation

<sup>2</sup> Whole Genome Amplifikation

<sup>3</sup> Rolling Circle Amplifikation

<sup>4</sup> Multiple Displacement Amplifikation <sup>5</sup> Polymerase Chain Displacement Reaction

### BIORONs' Expertise

BIORON is a well-established producer and worldwide trader of DNA polymerases. Since more than sixteen years BIORON has been offering a wide range of common and modified DNA Polymerases in the fields of Standard and HotStart PCR. This also includes polymerases for Real-Time PCR and high fidelity applications.

All polymerases are provided with optimized reaction buffers. For optimization on customers' side we provide different buffer systems for most of our polymerases.

### Customized Solutions

At BIORON we also offer customized services to a variety of PCR applications, like different high concentrated Taq polymerases which are suitable for lyophilisation and kit production. Please ask us for more information – your problem is our challenge to find the optimal solution.



## HotStart DNA Polymerases

HotStart polymerases provide improved sensitivity and specificity by inhibition of Taq Polymerase at room temperature. The inactivation prevents formation of unwanted by-products. BIORON offers different kinds of blocked HotStart polymerases (see page 4 & 5). The inhibition of chemical blocked polymerases is reversed when temperature reaches 90 °C for 2-3 minutes. Polymerases blocked by DNA-Aptamers are inactive until aptamers dissociate at temperatures above 50 °C. Polymerases blocked by antibodies are inactive until temperatures is above 70 °C.

BIORON is offering AntiTaq antibodies in storage buffer with glycerol and glycerol free:

Product	Application	Ref No	Pack Size
Anti-Taq 2 mg/ml	• Blocking of polymerase activity at ambient temperature	121005	500 µg
Anti-Taq, glycerol free 5 mg/ml		151005	500 µg

## SD Polymerase – setting the standard

BIORON's novel patented SD polymerase is a universal thermostable Strand Displacement DNA polymerase lacking the 5'-3' exonuclease activity. This Enzyme can combine the possibilities of isothermal Amplification and regular PCR. Efficient for high GC-content and difficult targets.

Initial denaturation steps can increase the accessibility of single strands during isothermal amplification and therefore raise the efficiency of the reaction. The optional antibody blocking inactivates the enzyme until initial heating.

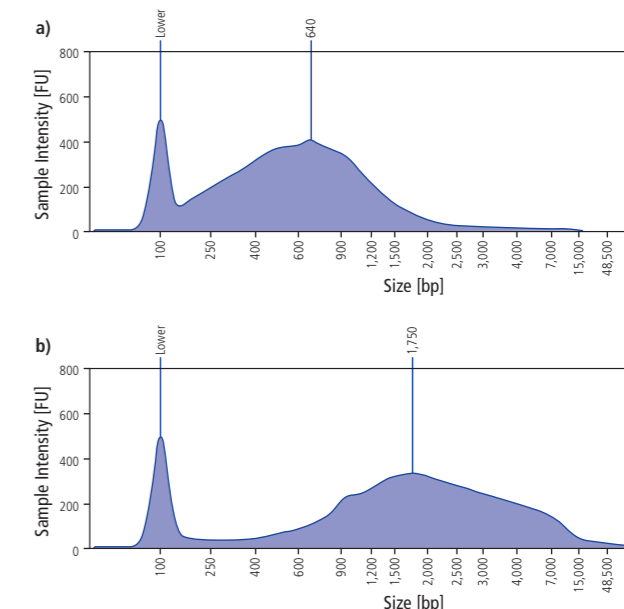
### SD Polymerase has been tested for:

- Whole Genome Amplification (please see next page)
- Rolling Circle Amplification
- T-ARMS
- Strand Displacement Amplification
- Loop Mediated Amplification
- Real-Time PCR
- Multiplex and Long Range PCR

## WGA Kit

BIORON offers a new type of Whole Genome Amplification Kit containing the unique SD Polymerase and using a Multiple Displacement Amplification (MDA). Less hands-on time due to the use of a single step protocol and ready-to-use buffers.

Coverage of the Kit is around 60% of the genome but differs to the coverage of other available Kits. In combination 80% coverage can be reached. Especially GC rich regions and difficult targets can be amplified. Up to 9000 bp of fragment length are achieved within less than 2 hours.



other WGA Kit (a) and BIORON One Step WGA Kit (b)

## Applications

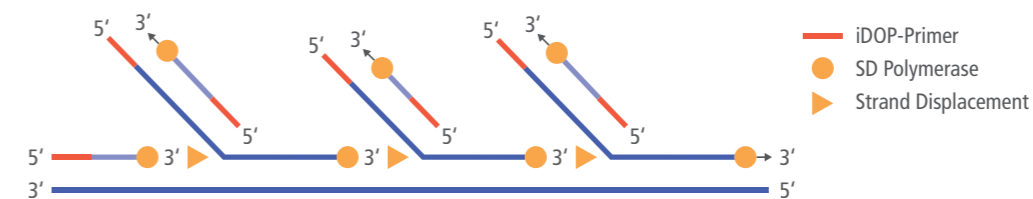
- Suitable for Single cell DNA analysis
- NGS ready
- SNP genotyping
- qPCR- and PCR-based mutation detection
- STR and RFLP analysis
- Array technologies (comparative genomic hybridization)

## One Tube genome amplification

- Take genomic DNA, transfer into cup with WGA-Kit components and amplify. Ready!

## SD Polymerase is the main component

- Thermostable enzyme provides PCR and MDA simultaneously
- Highest amplification rates
- No problems with GC-rich or highly repetitive regions



Product	Content	Ref No	Pack Size
One Step WGA Kit	SD Polymerase, 2.5x Ready Master Mix, control DNA, water	108725	25 rcs
		108750	50 rcs
Single Cell WGA Kit	SD Polymerase, 2.5x Ready Master Mix, Water, Lysis buffer	please ask for availability	25 rcs
			50 rcs



PCR Master Mixes from BIORON contain all necessary components for PCR: DNA polymerase, magnesium salts, dNTPs, water and optimized reaction buffer. Only primers and template have to be added by the user. Working with Master Mixes saves time, reduces the risk of contaminations and simplifies the entire workflow.

BIORON offers different types of Master Mixes in liquid and lyophilized form for several applications.

### Liquid Master Mixes

- For regular PCR application
- 2x concentrated
- Storage at -20 °C
- Taq Master Mix is suitable for Standard PCR and pathogen detection up to 5 kb, high sensitivity leads to high yield of products
- SuperHot Master Mix contains SuperHot Taq from BIORON and is suitable for different PCR applications with limited amount of template
- HotRox Master Mixes contain ROX reference dye to normalize the fluorescent signal on instruments compatible with this option, ROX concentration is depending on used instrument

Master Mix	Standard PCR	Multiplex PCR	Real-Time PCR	HotStart	Hot Start	Dye	Ref No	Pack Size
<b>Taq Master Mix</b>	Yes	No	No	No	No	No	101605 101625	200 rcs 5x 200 rcs
<b>SuperHot Master Mix</b>	Yes	Yes	Yes	Yes	Yes	No	119102 119110	200 rcs 5x 200 rcs
<b>HotRox Master Mix, low Rox</b>	No	Yes	Yes	No	Yes	Rox	119505	200 rcs
<b>HotRox Master Mix, high Rox</b>	No	Yes	Yes	No	Yes	Rox	119550	200 rcs

### Lyophilized Master Mixes

Liquid Master Mixes may have reduced stability because repeated freezing-thawing cycles can damage the polymerase. Lyophilized PCR Master Mixes with special additives have a significant higher stability and can be shipped at room temperature. For long-time storage +2 to +8 °C is recommended. The lyophilized Master Mixes are provided with a Recovery Solution for rehydration.

- Lyophilized Master Mixes are 2x concentrated
- Taq Master Mix is recommended for standard applications where no HotStart is needed
- TaqMan Master Mix is suitable for Real-Time PCR with TaqMan probes or fluorescent dye
- SuperHot Master Mix contains a HotStart Polymerase from BIORON and is suitable for pathogen detection
- Our new GreenHot Master Mix contains a fluorescent dye and can be used for Real-Time PCR, so no TaqMan probe is necessary

Master Mix	Standard PCR	Multiplex PCR	Real-Time PCR	HotStart	Hot Start	Dye	Ref No	Pack Size
<b>Taq Master Mix</b>	Yes	Yes	Yes	No	No	No	119101LY	2x 50 rcs
<b>SuperHot Master Mix</b>	Yes	Yes	Yes	Yes	Yes	No	119103LY	2x 50 rcs
<b>TaqMan Master Mix</b>	Yes	Yes	Yes	No	Yes	No	119104LY	2x 50 rcs
<b>GreenHot Master Mix</b>	No	Yes	Yes	No	Yes	Fluorescent Dye	119106LY	2x 50 rcs





## Standard dNTPs

Each particular dNTP is tested for purity by HPLC (>98%), UV and NMR spectroscopy, absence of nucleases including RNAses.

PCR performance of deoxynucleotides are tested with Taq DNA Polymerase.

Standard dNTPS	Ref No	Pack Size
4you4 dNTP Mix, 10 mM each	110001	200 µl
	110002	1 ml
Set of 4 dNTPs, 4 x 10 mM each	110031	4x 200 µl
	110032	4x 1 ml
Set of 4 dNTPs, 4 x 100 mM each	110011	4x 200 µl
	110012	4 x 1 ml
Set of 3 + 1 dNTPs, with dUTP, 4 x 100 mM (dATP, dCTP, dGTP, dUTP)	110014	4x 200 µl
	110015	4x 1 ml
dATP, 100 mM	110003	200 µl
	110004	1 ml
dATP, 10 mM	110023	200 µl
dCTP, 100 mM	110005	200 µl
	110006	1 ml
dCTP, 10 mM	110025	200 µl
dGTP, 100 mM	110007	200 µl
	110008	1 ml
dGTP, 10 mM	110027	200 µl
dTTP, 100 mM	110009	200 µl
	110010	1 ml
dTTP, 10 mM	110029	200 µl
dUTP, 100 mM	109001	200 µl
	109004	1 ml
dUTP, 10 mM	109021	200 µl

## Modified dNTPs

BIORON offers modified dNTPs for DNA labelling in high quality and highest purity.

Modified dNTPS	Ref No	Pack Size
Bio-11-dUTP, 1mM	509005	100 µl
Flu-12-dUTP, water solution, 1 mM	507004	40 µl
Aminoallyl-dUTP, 10 mM	513001	100 µl
AZT triphosphate, 100 mM	503010	100 µl
7-deaza-dGTP, 50 mM	508105	40 µl

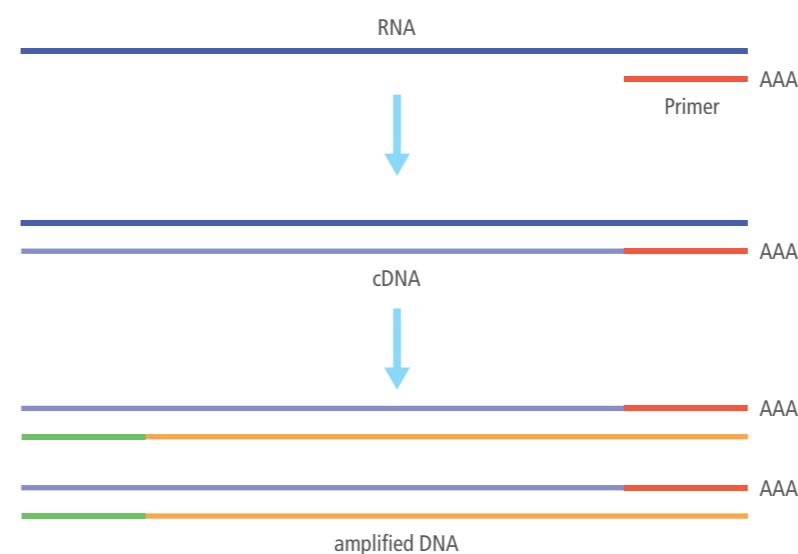
## RNA to cDNA

BIORON offers enzymes for reverse transcription and protection against RNA degradation with highest activity. The enzymes are provided with optimised buffers.

## Product line Reverse Transcription at a glance

Enzymes	Features	Application	Ref No	Pack Size
Reverse (M-MuLV, RNase H minus)	<ul style="list-style-type: none"> <li>Reverse transcriptase</li> <li>Recombinant</li> <li>RNase H minus</li> </ul>	<ul style="list-style-type: none"> <li>cDNA synthesis</li> <li>cDNA libraries</li> <li>Diagnostic</li> <li>Reverse transcription-PCR</li> </ul>	105100	10000 U
			105250	50000 U
Script III Reverse Transcriptase	<ul style="list-style-type: none"> <li>3rd generation reverse</li> <li>Recombinant</li> <li>Improved processivity</li> <li>Improved RNase H minus</li> <li>Higher specificity</li> <li>Higher yield</li> </ul>	<ul style="list-style-type: none"> <li>cDNA synthesis</li> <li>cDNA libraries</li> <li>Diagnostic</li> <li>Reverse transcription-PCR</li> </ul>	105510	10000 U
			105550	50000 U
RNase Inhibitor	<ul style="list-style-type: none"> <li>Inhibits RNase activity</li> </ul>	<ul style="list-style-type: none"> <li>RNA protection</li> </ul>	105302	2000 U
			105320	10000 U

Primer	Features	Application	Ref No	Pack Size
Random Primer	<ul style="list-style-type: none"> <li>Mixture of single-stranded random hexanucleotides</li> </ul>	<ul style="list-style-type: none"> <li>For cDNA synthesis</li> </ul>	402001	30 µg
Oligo (dT) 15 Primer	<ul style="list-style-type: none"> <li>Synthetic single stranded 15-mer primer</li> <li>Oligo (dT)15 hybridize to Poly(A)-tail of mRNA</li> </ul>	<ul style="list-style-type: none"> <li>Primer for reverse transcription of mRNA: first strand cDNA</li> </ul>	509001	30 µg

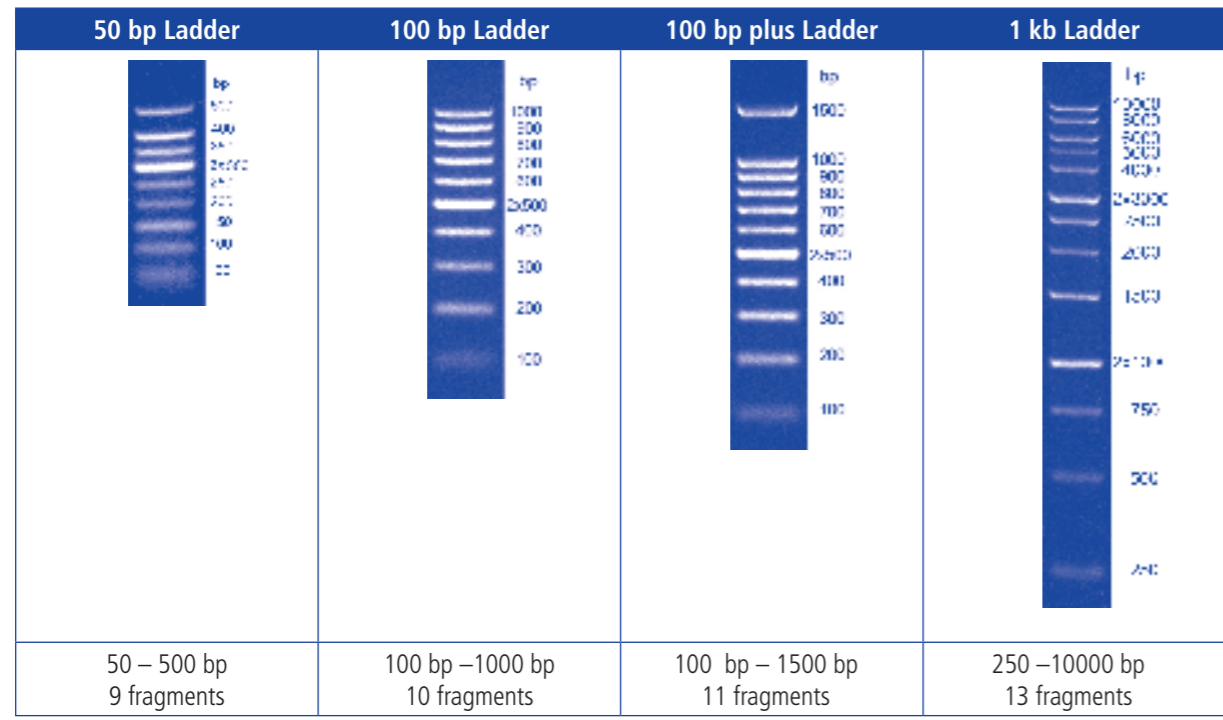


Scheme of Reverse Transkription

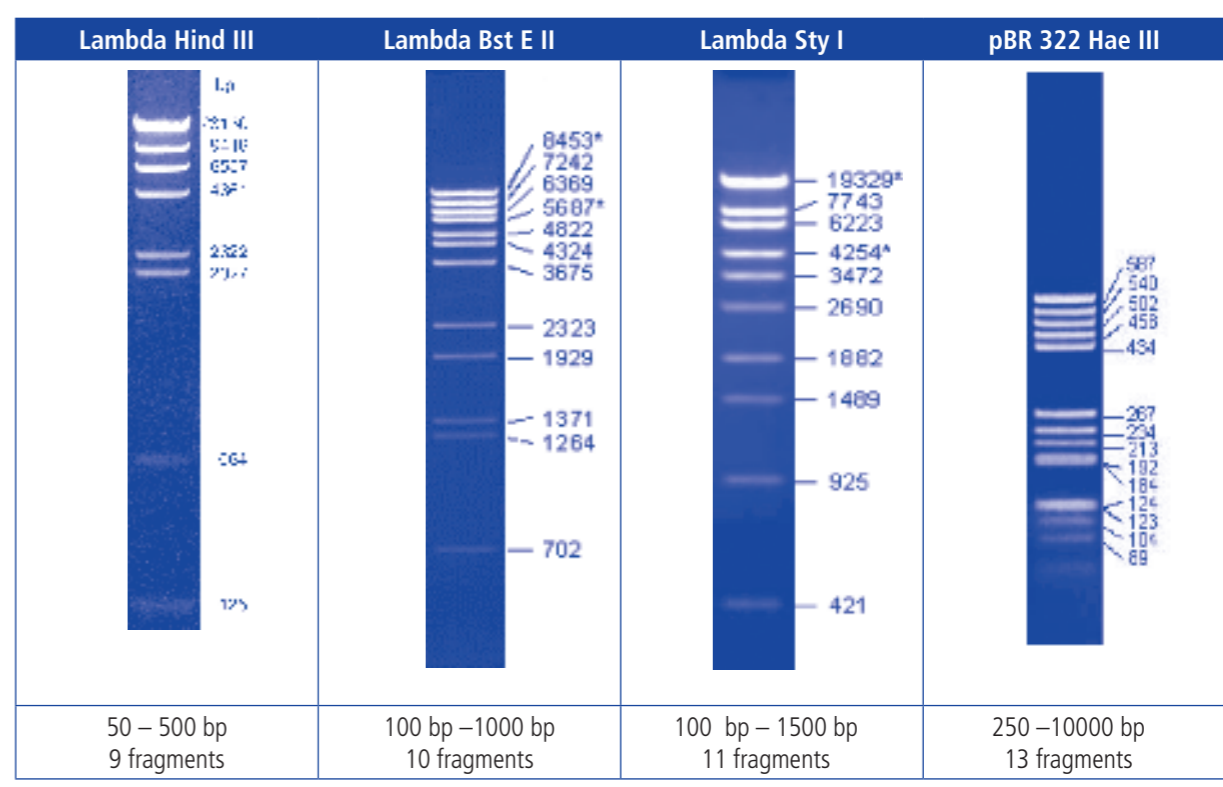


BIORON offers different Marker and DNA Ladders for sizing of DNA fragments in agarose gel electrophoresis:

DNA Size	Product	With stain	Ref No	Pack Size
50 bp	50 bp plus DNA Ladder	No	304008	50 µg
			304016	250 µg
	50 bp plus DNA Ladder ready to use	Yes	304007	50 µg
			304017	250 µg
100 bp	100 bp DNA Ladder	No	304005	50 µg
			304025	250 µg
	100 bp DNA Ladder ready to use	Yes	306009	50 µg
			306017	250 µg
	100 bp plus DNA Ladder	No	306005	50 µg
			306025	250 µg
	100 bp plus DNA Ladder ready to use	Yes	304105	50 µg
			304125	250 µg
1 kb	1 kb DNA Ladder	No	305005	50 µg
			305025	250 µg
	1 kb DNA Ladder ready to use	Yes	305105	50 µg
			305125	250 µg



DNA	Product	Ref No	Pack Size
Phage Lambda	Phage Lambda DNA/Hind III Marker	302005	50 µg
		302025	250 µg
	Phage Lambda DNA/Bst E II Marker	303005	50 µg
		303025	250 µg
	Phage Lambda DNA/Sty I Marker	307005	50 µg
307025		250 µg	
Plasmid pBR322	pBR322/Hae III Marker	312005	50 µg
		312025	250 µg



Loading Buffer for gel electrophoresis

Product	Ref No	Pack Size
Loading Buffer IV (10x)	306105	0.5 ml
Loading Buffer II (6x)	306205	0.5 ml



## PureColumn DNA Extraction Kit



### Features

- Excellent yields and recovery rates
- Highly pure DNA
- For manual use
- Effective removal of inhibitors
- Fast and easy preparation of DNA up to 25 µg
- Suitable also for highly processed food

The PureColumn DNA Extraction Kit uses the reversible binding properties of the silica-based filter membrane, combined with the speed of mini-column spin technology. Cellular debris, proteins and other contaminants are washed away by specific buffers. The high quality DNA is finally eluted in elution buffer and can be used in applications like PCR, Real-Time PCR or sequencing.

Genomic DNA can be isolated from:

- Blood
- Plasma, sputum
- Eucaryotic cells
- Bacteria
- Canned and highly processed food

Product	Sample	Isolation	Application	Ref .No	Pack Size
<b>PureColumn DNA Extraction Kit</b>	<ul style="list-style-type: none"> <li>• Bacteria</li> <li>• Blood</li> <li>• Cells</li> </ul>	Silica Spin Column	<ul style="list-style-type: none"> <li>• PCR</li> <li>• Genotyping</li> <li>• Blotting</li> <li>• Sequencing</li> <li>• qPCR</li> </ul>	BI88050	50 preps
				BI88100	2x 50 preps
<b>Ron's Line</b>	<ul style="list-style-type: none"> <li>• Bacteria</li> <li>• Blood</li> <li>• Cells</li> </ul>		<ul style="list-style-type: none"> <li>• PCR</li> <li>• Sequencing</li> <li>• Cloning</li> </ul>	Different kits: see page 15	50 preps
					5x 50 preps

## Ron's column based purification system

Ron's product line is an innovative column based system for extraction and purification of nucleic acids from a variety of sources such as:

- Genomic DNA and RNA from blood, cells or tissue
- Classical purification of plasmids and PCR samples
- Extraction of DNA from gel

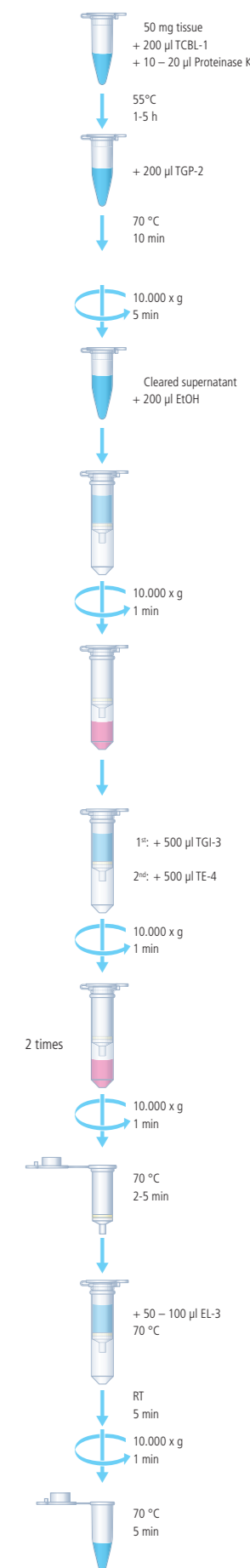
### Features

- For numerous applications
- No need of organic compounds
- Yield up to 25 µg DNA
- Fast and easy protocol
- Effective removal of inhibitors

### Kit content

The kit contains buffer for lysis, DNA binding, washing, elution, spin columns, collection and recovery tubes and appropriate enzymes like proteinase K or RNAses.

Product	Purification	Ref .No	Pack Size
<b>Ron's Plasmid Mini Kit</b>	Plasmids	806942	50 preps
		806942L	5x 50 preps
<b>Ron's PCR Pure Mini Kit</b>	PCR samples	806493	50 preps
		806493L	5x 50 preps
<b>Ron's Gel Extraction Mini Kit</b>	Agarose gels	802501	50 preps
		802501L	5x 50 preps
<b>Ron's Blood /Cell DNA Mini Kit</b>	Eucaryotic cells	803482	50 preps
		803482L	5x 50 preps
<b>Ron's Tissue DNA Mini Kit</b>	Tissue	803496	50 preps
		803496L	5x 50 preps



flow chart of Ron's Tissue DNA Mini Kit





BIORON offers a set of various enzymes and other products for molecular biological applications such as cloning and DNA sequencing, PCR carry-over protection. Proteinase K for purification and isolation of nucleic acids is available as solution or lyophilized powder. The enzymes are purified, available in highest activity and provided with optimised buffers.



Enzyme	Features and Application	Ref No	Pack Size
<b>Proteinase K</b>	<ul style="list-style-type: none"> <li>Broad-spectrum protease</li> <li>Highest stability against urea, SDS</li> <li>For nucleic acid purification</li> <li>Free of RNase/DNase</li> </ul>	405002	200 mg
		405010	1 g
<b>Proteinase K Solution</b>		405102	1 ml
		405152	5 x 1 ml
<b>T4 DNA Ligase</b>	<ul style="list-style-type: none"> <li>Recombinant enzyme</li> <li>For cloning of restriction fragments (sticky-and blunt ends)</li> <li>Free of endo-/exonuclease</li> </ul>	402002	2000 U
		402010	10000 U
<b>T4 Polynucleotide Kinase</b>	<ul style="list-style-type: none"> <li>Phosphorylation of DNA/RNA</li> <li>Free of endo-/exonuclease</li> </ul>	403005	500 U
		403025	2500 U
<b>DNA Polymerase I, large Fragment (Klenow)</b>	<ul style="list-style-type: none"> <li>DNA sequencing</li> <li>Fill-in /removal reaction for blunt ends</li> <li>2nd strand cDNA synthesis</li> </ul>	401002	200 U
		401010	1000 U
<b>Uracil-DNA Glycosylase (UDG)</b>	<ul style="list-style-type: none"> <li>Recombinant</li> <li>Hydrolysis of uracil from DNA</li> <li>PCR Carry-over protection</li> </ul>	111005	200 U
		111025	1000 U

Product	Features and Application	Ref No	Pack Size
<b>Agarose, Molecular Biology Grade</b>	<ul style="list-style-type: none"> <li>Electrophoretic separation of nucleic acids</li> <li>Free of DNase/RNase</li> <li>Resolution: 50 bp – 50 kb</li> </ul>	604001	100 g
		604005	500 g
<b>Linear Polyacrylamide Solution 5 mg/ml</b>	<ul style="list-style-type: none"> <li>Enhancing small amounts of DNA and RNA for PCR applications</li> </ul>	130101	1ml
		130105	5x 1ml

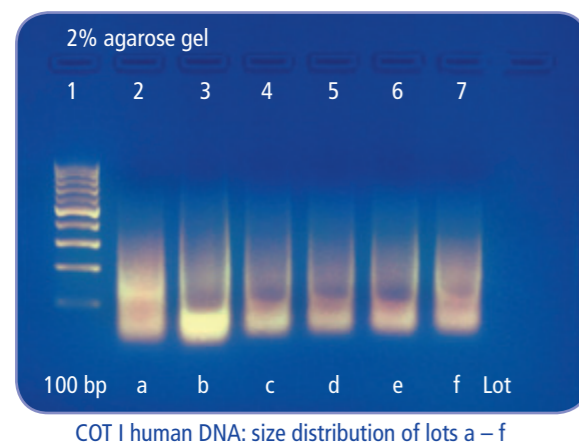
### Restriction Enzymes

Restriction endonucleases provide the right sticky end for gene cloning. BIORON offers a set of Restriction endonuclease in best purity and highest activity.

Enzyme	Ref No	Pack Size	Enzyme	Ref No	Pack Size	Enzyme	Ref No	Pack Size
<b>Alu I</b>	250101S	600 U	<b>Hind III</b>	250116S	2000 U	<b>Sal I</b>	250130S	2000 U
	250101L	3000 U		250116L	10000 U		250130L	10000 U
<b>ApaI I</b>	250148S	2000 U	<b>Hinf I</b>	250117S	2500 U	<b>Sau3A I</b>	250147S	500 U
	250148L	10000 U		250117L	12500 U		250147L	2500 U
<b>Asu II</b>	250102S	3500 U	<b>Hpa I</b>	250118S	750 U	<b>Sca I</b>	250131S	1200 U
	250102L	17500 U		250118L	3750 U		250131L	6000 U
<b>BamH I</b>	250103S	7500 U	<b>Kpn I</b>	250119S	3500 U	<b>Sfi I</b>	250132S	400 U
	250103L	37500 U		250119L	17500 U		250132L	2000 U
<b>Bcl I</b>	250104S	2500 U	<b>Mbo I</b>	250120S	300 U	<b>SgrB I (Sac II)</b>	250133S	1600 U
	250104L	12500 U		250120L	1500 U		250133L	8000 U
<b>Bgl I</b>	250105S	2000 U	<b>MspC I (Afl II)</b>	250121S	1300 U	<b>Sla I (Xho I)</b>	250134S	5000 U
	250105L	10000 U		250121L	6500 U		250134L	25000 U
<b>Bgl II</b>	250106S	1300 U	<b>Nae I</b>	250122S	300 U	<b>Sma I</b>	250135S	1100 U
	250106L	6500 U		250122L	1500 U		250135L	5500 U
<b>BseA I (BspM II)</b>	250107S	650 U	<b>Nco I</b>	250123S	600 U	<b>SnaB I</b>	250136S	350 U
	250107L	3250 U		250123L	3000 U		250136L	1750 U
<b>BseB I (BstN I)</b>	250108S	4500 U	<b>Nhe</b>	250146S	550 U	<b>Sph I</b>	250137S	250 U
	250108L	22500 U		250146L	2750 U		250137L	1250 U
<b>BseC I (Cla I)</b>	250109S	3500 U	<b>Not I</b>	250124S	300 U	<b>SseB I (Stu I)</b>	250138S	1500 U
	250109L	17500 U		250124L	1500 U		250138L	7500 U
<b>BshF I (Hae III)</b>	250110S	7000 U	<b>Nru I</b>	250125S	700 U	<b>Ssp I</b>	250139S	600 U
	250110L	35000 U		250125L	3500 U		250139L	3000 U
<b>BssA I (Cfr10 I)</b>	250112S	300 U	<b>PspPI (Sau96I)</b>	250126S	500 U	<b>Sst I (Sac I)</b>	250140S	1600 U
	250112L	1500 U		250126L	2500 U		250140L	8000 U
<b>BstE II</b>	250144S	1750 U	<b>Pst I</b>	250127S	8000 U	<b>Sty I</b>	250141S	6000 U
	250144L	8750 U		250127L	40000 U		250141L	30000 U
<b>CspA I (Age I)</b>	250113S	150 U	<b>Pvu II</b>	250128S	4500 U	<b>Taq I</b>	250142S	3500 U
	250113L	750 U		250128L	22500 U		250142L	17500 U
<b>EcoR I</b>	250114S	5000 U	<b>Rsa I</b>	250129S	1000 U	<b>Xba I</b>	250143S	3500 U
	250114L	25000 U		250129L	5000 U		250143L	17500 U
<b>EcoR V</b>	250115S	3000 U						
	250115L	15000 U						



### DNA for special application



BIORON also offers different kinds of DNA for several applications.

#### Human DNA

BIORON is one of the largest manufacturers of COT I Human DNA. It is made out of male human placenta and consists mainly of rapidly annealing repetitive elements. The manufacturing process of COT I Human DNA is improved to guarantee a constant size distribution of 50 to 300 base pairs.

COT I Human DNA suppresses a non-specific hybridisation of probes while detecting human DNA. This improves the signal to noise ratio and decreases false positive signals for applications like Microarrays, In Situ Hybridisations and Southern Blots.

Product	Features and Application	Ref No	Pack Size
Human DNA	<ul style="list-style-type: none"> <li>Human placental chromosomal DNA</li> <li>Southern blot hybridisation</li> <li>Genomic analysis</li> <li>Construction genomic library</li> </ul>	401005	2 g bulk on request
COT I Human DNA	<ul style="list-style-type: none"> <li>DNA from Human Placenta enriched by highly repetitive sequences</li> <li>Background reduction</li> <li>Saturation of unspecific sequences in filter and microarray hybridisation experiments</li> <li>98% repetitive sequences</li> </ul>	401001	500 µg

### Plasmid and Phage DNA

Product	Features and Application	Ref No	Pack Size
Phage T7 DNA	<ul style="list-style-type: none"> <li>Bacteriophage T7 DNA</li> <li>Linear DNA, 39937 bp</li> </ul>	310005	50 µg
		310025	250 µg
pUC 19 plasmid DNA	<ul style="list-style-type: none"> <li>Cloning</li> </ul>	309005	50 µg
		309025	250 µg
Phage Lambda DNA	<ul style="list-style-type: none"> <li>Phage Lambda cI857 Sam7 DNA isolated from E. coli</li> </ul>	301005	50 µg
		301025	250 µg
		301100	1 mg

### Real-Time Cycler

RealLine Cyclers for Real-Time-PCR-Assays are available in 48 well and 96 well format for research or high sample throughput lab applications. Both types of devices can be provided with four or five channels (FAM, HEX, ROX, Cy5, Cy5.5). RealLine Cyclers are compatible to commercially available plates and tubes. Just open the tube, add the sample and run the PCR!

Product	Block Size	REF
RealLine Cycler 48-4	48 wells	910484
RealLine Cycler 48-5	48 wells	910485
RealLine Cycler 96-4	96 wells	910964
RealLine Cycler 96-5	96 wells	910965



#### Cycler for Standard-PCR

BIORON also offers Cycler for Standard-PCR in different variations. For more information please visit our Homepage: [www.bioron.net/en/devices/pcr-cycler](http://www.bioron.net/en/devices/pcr-cycler)

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