DNA Sequencing and Fragment Analysis by Capillary Electrophoresis

Product Guide



- BrilliantDye® Terminator Cycle Sequencing Kits
- NimaPOP™ Polymers and Buffers for ABI Genetic Analyzers
- ExS-Pure[™] Enzymatic PCR Cleanup
- AmpliClean™ Magnetic Bead PCR Cleanup
- iX-Pure[™] DyeTerminator Resin Based Cleanup
- D-Pure[™] DyeTerminator Magnetic Bead Cleanup
- Fluorescent Internal Size Standards
- ReCAP[™] Capillary Array Regeneration Kit



Introduction

Sanger sequencing is a method of DNA sequencing, based on the selective incorporation of chain-terminating dideoxynucleotides by DNA polymerase during in vitro DNA replication, developed by Frederick Sanger and colleagues in 1977. Since the introduction of massive parallel sequencing (NGS), the Sanger method remains in wide use, for smaller-scale projects, validation of NGS results and for obtaining especially long contiguous DNA sequence reads.

Fluorescent DNA fragment analysis is one of the most useful methods in molecular biology. The method measures the relative size of DNA fragments with a very high resolution and reproducibility, by capillary electrophoresis (CE) of fluorescent labelled DNA fragments on an automated DNA CE Genetic Analyzer, using internal fluorescent size standards.

NimaGen offers a complete portfolio of high-quality and cost-effective reagents for Applied Biosystems™ capillary electrophoresis based Genetic Analyzers:

- ✓ 310 single capillary Genetic Analyzer
- ✓ 3100 Avant (4 capillaries) and 3100(16 capillaries) Genetic Analyzer
- ✓ 3130 (4 capillaries) and 3130XL(16 capillaries) Genetic Analyzer
- ✓ 3500 (8 capillaries) and 3500XL(24 capillaries) Genetic Analyzer
- ✓ 3730 (48 capillaries) and 3730XL(96 capillaries) Analyzer
- ✓ SeqStudio[™] (4 capillaries) Genetic Analyzer

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Brilliant Dye[®] Terminator Cycle Sequencing Kits

The Direct Drop-in Alternative for BigDye™

- **✓** Compatible with all ABI Genetic Analyzers
- ✓ Available in chemistry versions 1.1,
 3.1 and dGTP versions 1.1 and 3.1

The BrilliantDye® Terminator Cycle sequencing kits are based on the trusted Sanger Chain Termination method.

Format

The kits are delivered as a 2.5x concentrated ready-reaction premix, fully optimized for a highly flexible chemistry, designed for all kinds of sequencing applications, including de novo sequencing and resequencing. The kits generate data with uniform peak heights and optimized signal balance to produce long, high-quality reads.

Two versions available

The BrilliantDye® Terminator v1.1 Cycle sequencing kit is designed for specialty applications that require optimal basecalling adjacent to the primer. The BrilliantDye® Terminator v3.1. Cycle sequencing kit is the method of choice for longest reads.

Dye set

The kits are optimized to run with Dye Set E for BrilliantDye® Terminator v1.1 and Dye Set Z for BrilliantDye® Terminator v3.1. Refer to your instrument manual how to calibrate the system with this Dye Set.

Kits content

The BrilliantDye® Terminator Cycle sequencing kits contain all required reagent components for the sequencing reaction in a ready reaction, pre-mixed format:

- · Reaction Ready seq. premix
- 5X sequencing buffer
- pGem control
- M13(-21) primer

No need for changes in protocol, settings or calibration

Compatibility

the protocol.

The kits are compatible with ABI Genetic Analyzers of the 310, 3100, 3130, 3500, 3730 and SeqStudio™ Series as well as the Promega Spectrum CE system. No need for changing protocols, workflows, settings and calibrations.

You also may need D-Pure™ or iX-Pure™ DyeTerminator Cleanup, NimaPOP™ polymers and running buffers, ExS-Pure™ enzymatic PCR cleanup and ReCap™ capillary array regeneration system.

ALSO AVAILABLE:

dGTP BrilliantDye® versions 1.1 and 3.1

For sequencing through G- and GT-rich templates,
NimaGen offers the dGTP BrilliantDye® kits, optimized
for challenging sequence templates, by replacing
the dITP with dGTP.

BigDye[™] is a trademark of Applied Biosystems[™], LLC.





NimaPOP™

High Quality Genetic Analyzer Polymers

- ✓ High resolution and performance
- **✓** Long Shelf Life
- ✓ Compatible with Applied Biosystems™ Genetic Analyzers
- ✓ No need for changes in any settings/ calibrations



Capillary Electrophoresis separation matrixes using state-ofthe-art polymer technology: NimaPOP™4, NimaPOP™6 and NimaPOP™7.

These new polymers have an excellent dynamic coating and separating ability with all different applications. NimaPOP™ polymers can be used without any requirement for changes in run protocol, conditions or spectral calibrations. Developed with the latest polymer chemistry technology, NimaPOP™ demonstrates an increased stability and resolution

Compatibility

The polymers are available in different formats:

- Click-in bottles of 5, 10 and 28 mL for 3130 and 3730 Series Genetic Analyzers
- Vials of 5 and 10 mL for 310 and 3100 Series Genetic Analyzers
- Pouches for 384 and 960 samples for 3500 Series Genetic Analyzers

NimaPOP™ for 3500 Series Genetic Analyzer

Polymer

Available in preformulated pouches with Radio Frequency Indentification (RFID) labels, NimaPOP™ polymers for the 3500 Series Genetic Analyzer, that are compatible for direct connection to the instrument.

Running buffer for 4 complete refills

The NimaPOP™ 10x running buffer is available in a quantity of 60ml, enabling you to make up 600ml buffer.

The process is easy; just empty the used containers, rinse and refill with the new buffer.

Replace the used RFID label with the new, self-adhesive, label supplied with the NimaPOP™ buffer. With every bottle of 10x NimaPOP running buffer, you'll receive 4 new RFID labels for the ABC and 4 new labels for the CBC container.

Capillary Electrophoresis Polymers

Extended 3500 On-Instrument lifespan

The RFID labels supplied with the NimaPOP™ polymers and NimaPOP™ buffers have been formulated with an increased "on-instrument" lifespan, doubling its on instrument use when compared to the original product from 7 to 14 days.

Trace Score & QV20+ Reading Length Comparison NimaPOP™ with POP-7™				
	POP-7™	NimaPOP™-7 Polymer		
Score (ave.)	31.83	32.28		
QV20+ Length (ave.)	590.0	601.4		

Data is obtained by analyzing >3.900 samples, including PCR products and plasmids

POP-7™ is a trademark of Applied Biosystems™, LLC.

ExS-Pure™

PCR Cleanup Kit

- ✓ Direct replacement for ExoSAP-IT™ Express
- ✓ 5 minute protocol
- ✓ Removes primers and dNTPs from PCR products
- ✓ Newest generation of heat-labile enzymes
- ✓ Add directly to your PCR product
- **✓** Easily incorporated in automated workflows
- ✓ 100% sample recovery



NimaGen's ExS-Pure™ Enzymatic PCR cleanup is designed for fast and easy PCR cleanup. The reagent kit consists of two recombinant hydrolytic enzymes: Exonuclease-I and Shrimp Alkaline Phosphatase. Combined they eliminate all unwanted dNTP's and residual primers from your PCR products, which would interfere with downstream applications, such as sequencing, SNP analysis, genotyping or cloning.

Principl

Exonuclease I has a strong 3' to 5' exonuclease activity. When introduced to a reaction mixture at 37°C, it degrades single-stranded primer oligonucleotides while leaving the double-stranded PCR products unaffected. Shrimp Alkaline Phosphatase deactivates dNTPs, by removing 5'-phosphates. Both enzymes can be 100% inactivated by heating to 90°C for 1 minute. The combination of the two enzymes ensures complete dephosphorylation of dNTP's and degradation of residual primers, without the need of buffer change.

Straightforward workflow

Minimal hands-on time: just add ExS-Pure™ to your PCR product and the cleanup is performed in a standard thermal cycler within 5 minutes

100% Sample recovery

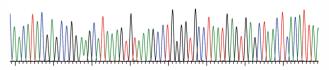
With ExS-Pure[™] there is no need for time-consuming gel, column or magnetic bead purifications. Both short and long stranded PCR products are left completely intact.

Maximize your data quality from PCR products

DNA sequencing, SNP analysis and many other applications require PCR products which are free of dNTP's and primers. For DNA sequencing, unincorporated primers and dNTP's can lead to high background and miscalling of bases. With ExS-Pure™ you can efficiently remove these contaminants and make improvements in read length and base calling.

High sequence Quality after ExS-Pure™ Cleanup

A ACATAC GAGO COGA AGCATA A AGTOTA A AGCOT COGT COCTA A TOAGTGA COTA ACTOACATTA



Chromatogram shows a sample, sequenced with NimaGen's BrilliantDye® v1.1 Cycle sequencing kit and NimaPOP-7™ polyme on a 3130 Genetic Analyzer

ExS-Pure[™] workflow





Add ExS-Pure™ to your PCR products



~~∑) 37°C

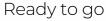
Enzymatic reaction



Stop reaction (inactivate enzymes)

90°C







Ready for downstream applications





AmpliClean™

Magnetic Bead Based PCR and NGS Library Clean-Up and Size Selection

- ✓ Recover amplicons >100 bp with consistency and high reproducibility
- ✓ Efficient and complete removal of contaminants such as primers, primerdimers, salts and dNTP's
- **✓** Highly stable PCR products at 4°C

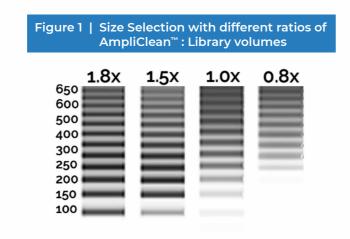


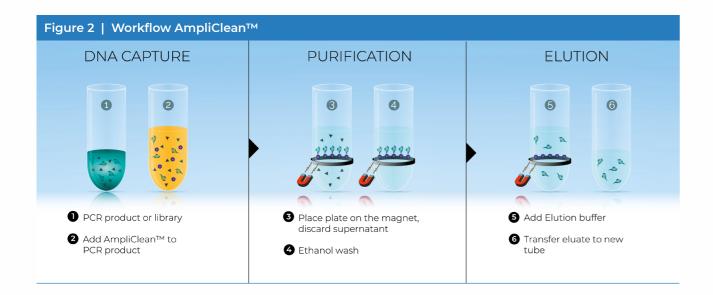
AmpliClean™ is a magnetic bead based clean-up method for the purification of Nucleic Acids. With its high flexibility it allows for standard cleanup and size selection.

AmpliClean™ removes, salts, primers, primer-dimers and dNTPs, leaving ultra-pure DNA of the desired length. Purified products can be used directly for downstream applications such as Sanger sequencing, NGS and microarrays. The protocol is highly flexible for manual operation and can be easily incorporated in any liquid handling system.

Features:

- Easy workflow (figure 2)
- Recovery and purification of Amplicons >100 bp
- Efficient and complete removal of contaminants, such as primers, primer-dimers, salts, dNTP's
- · Size Selection of NGS libraries (figure 1)





D-Pure™ DyeTerminator Cleanup Kit

Enabling Automation Technologies for Sanger (Cycle) Sequencing

- ✓ A rapid, high performance dye-terminator removal process based on magnetic beads
- Completely automatable with liquid handling systems
- **✓** Cost-effective
- ✓ Reduce sample-to-sample variation

The D-Pure™ DyeTerminator Cleanup kit is a magnetic bead-based, low to high-throughput purification method for DNA sequencing reactions (BigDye™ or BrilliantDye® terminator v1.1 or 3.1). The kit consists of a magnetic beads solution. With this paramagnetic bead format you can easily perfom manual or fully automated, high-throughtput dye-terminator removal without any centrifugation or filtration steps.

Each component has been optimized for removing salts and unincorporated Dye-dideoxinucleotides from DNA sequencing reaction mixtures. The purified DNA products are very stable and the protocol can be easily adapted in current workflows, with identical protocol to other bead based systems on the market.

High Quality

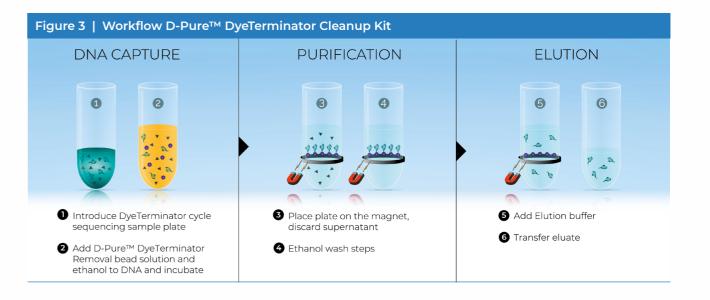
With D-Pure™ purified sequencing reactions result in clean chromatograms, very high Signal-to-Noise (S/N) ratios, High Quality scores and long read lengths, with 100% removal of any DyeTerminator Dye blobs, often seen in poorly purified reaction chromatograms.

D-Pure"

D-Pure™

Alpaqua magnet plates

NimaGen also offers Alpaqua magnet plates, the leading brand for magnetic separation devices. The plates are used in combination with D-Pure™ DyeTerminator removal or other magnetic bead-based products and are optimized for automation.







iX-Pure™

Rapid DyeTerminator Resin Based Cleanup

- **✓** Eliminate liquid transfer: Use a single plate
- ✓ Efficient removal of cycle sequencing reaction contaminants
- **✓** Straightforward protocol
- **✓** Very competitive prices
- **✓** Rapid and reliable results
- Compatible with BigDye XTerminator™ run modules



The iX-Pure™ purification kit is a fast purification method for DNA sequencing reactions that removes unincorporated DyeTerminators and salts. The cleanup is complete in under 40 minutes and requires minimal hands-on time.

Compatibility

These reagents can be added as a premix or sequentially. Compatible with BigDye XTerminator™ run modules.

It is essential to remove the contaminants, especially the unincorporated ddNTP dyes, from the completed sequencing reaction. Failure to remove these contaminants results in signal reduction and interference of peak separation and reading. Different mechanisms are available for cleaning up the sequencing reactions. In one mechanism, contaminants bind to special resins and get removed. In another mechanism, extension products bind to magnetic beads and are separated from contaminants. Contaminants can also be removed by ethanol

Resin based DyeTerminator removal

precipitation of DNA, a time-consuming procedure. It is important to compare the performance of different purification kits in terms of downstream sequencing quality.

We provide iX-Pure™ Purification Kit and iX-Pure™ Sequencing Reaction Cleaning Beads, both of which are optimized for downstream sequencing performance.

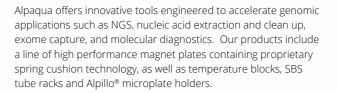
1 Add iX-Pure™ 2 Incubate 3 Injection Capillary Purified sample iX-Pure™ reagent to your finished reaction Vortex Centrifuge

BigDye XTerminator™ is a trademark of Applied Biosystems, LLC.

Alpaqua Magnet Plates

Magnetic Bead Based PCR and NGS Library Clean-Up and Size Selection

- ✓ 50 µL 2 mL reaction volumes
- ✓ Elute in as little as 10 μL
- **✓** Up to 4.5x faster separation times
- ✓ Universal plate & robot compatibility





Unmatched separation speed

Alpaqua selection guide magnet plates					
Plate	Magnet type	Format	Maximum Working volume	Minimum Elution Volume	Usage
MagPlate 24 A000270	Ring – N48	24	10 mL	~ 100 µl	Large volume samples in GE Whatman UniPlate 24 well block.
Magnum FLX®24 A000440	Ring – N52 Solid-core N50	24	10 mL	~ 40 µl*	Large volumes in most 24 well blocks. Increased speed and efficiency. Low elution volume.
Catalyst® 48 A000530	Slotted Ring – N52	48	3.5 mL	40 µl	Bridges the gap between 96- and 24-well plates. Larger volumes up to 3.5 ml, or rapid separation of smaller volumes. Very easy to pipet manually. No springs.
96R Ring Magnet A001219	Ring – N38	96	350 µL	20-25 μL*	General needs. Most economical.
96S Super Magnet A001322	Ring – N48	96	1 mL	20-25 μL*	Fast separations. Larger volumes. General needs.
96M Magnum™ A000250	Ring – N50	96	2 mL	20-25 µL*	Rapid separations. Large 96-well volumes. High viscosity samples.
LE Magnet A000350	Ring – N48	96	300 µL	8 µL	Low elution volume for high [DNA]. 96-well PCR plates only.
Magnum™ EX A000380	Ring – N50	96	2 mL	20-25 μL*	Universally compatible with 96 well micro- plates. Rapid separation. Large 96-well volumes. High viscosity samples.
Magnum FLX® A000400	Solid-core Ring Magnets – N50	96	2 mL	RB: 20-25 μL* PCR: 10 μL	Universally compatible with 96 well micro- plates. Low elution volume for high [DNA] Fastest separation times. Largest 96-well volumes. High viscosity samples.
MIDI Magnet® A000430	Post Magnets – N50	96	800 µL (AB-0859) 2 mL (AB-0932)	20-25 μL	Designed for AB-0859 (MIDI Plate); also works with AB-0932. Easy manual pipetting.
Catalyst™ 96 A000550	Slotted Ring – N50	96	2 mL	RB: 20-25 μL PCR: 10-12 μL	Like Magnum EX, but especially designed for manual pipetting. Low elution volumes in PCR-plates and strips (strips require adapter P000555). No springs.
384-well Magnet A001222	Post – N38	384	40 µL	15 µL	Highest throughput.

^{*} Certain microplate types may require higher elution volumes. For proper elution, beads must be completely covered with buffer.

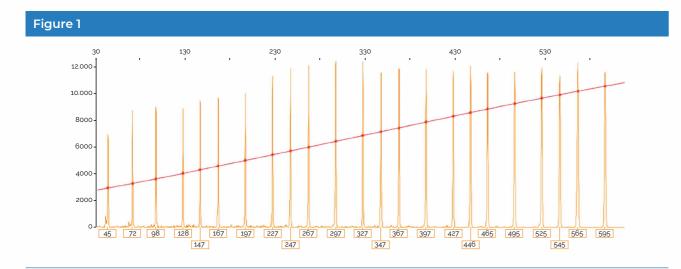


Fluorescent Internal Size Standards for Fragment Analysis

NimaGen offers a set of very cost-effective internal fluorescent Size Standards for Fragment Analysis, with ROX $^{\text{TM}}$ and a LIZ $^{\text{TM}}$ fluorescent dyes.

The Red-500 and Orange-500 DNA Size Standards are a direct drop-in replacement with the GS500ROX and GS500LIZ, with identical fragments and mobility.

The Red-600 and Orange-600 DNA Size Standards have an improved size distribution, according to figure 1.



ReCap™ Capillary Array Regeneration Kit

for ABI 3130 and 3730 Series Genetic Analyzers



One of the significant costs in the CE workflow is the capillary array. Due to poor resolution, mobility and/or increased fluorescent background in one or more capillaries, the array will eventually need to be replaced after a certain number of runs.

ReCap™ Capillary Array Regeneration kit offers complete rejuvenation and revitalization of old and failing capillaries. The kit can be used on capillary arrays showing a decline in resolution or displaying smears or tails in the electropherogram.

Additionally, it will clean the instrument pump blocks, preventing or removing signs of yellow or red haze.

The kit contains 4 different buffer solutions, to be applied sequentially to the pump blocks and capillaries via the instrument's inbuilt Water Wash Wizard protocol.

With ReCap™ maintain optimal performance, restore failing arrays to like new, see immediate data quality improvements and avoid the costs of purchasing a new array.

Ordering Information

BrilliantDye® [page 1]

Brilliant Dye®						
Description	p/n	Rxn	RR seq.Premix	5X Seq.Buffer	pGEM control	M13(-21) primer
	BRD1-024	24	192 µL	0.65 mL	10 µL	10 μL
BrilliantDye®	BRD1-100	100	800 µL	2.0 mL	10 µL	10 μL
Terminator (v1.1)	BRD1-1000	1000	10 x 800 µL	8 x 2.0 mL	50 µL	50 μL
	BRD1-5000	5000	2 x 20 mL	2 x 28 mL	50 µL	50 μL
	BRD1-25K	25000	10 x 20 mL	10 x 28 mL	50 µL	50 μL
	BRD3-024	24	192 µL	0.65 mL	10 µL	10 μL
	BRD3-100	100	800 µL	2.0 mL	10 µL	10 μL
BrilliantDye®	BRD3-1000	1000	10 x 800 µL	8 x 2.0 mL	50 µL	50 μL
Terminator (v3.1)	BRD3-5000	5000	2 x 20 mL	2 x 28 mL	50 µL	50 μL
	BRD3-25K	25000	10 x 20 mL	10 x 28 mL	50 µL	50 μL
dGTP BrilliantDye®	BRDG1-100	100	800 µL	2.0 mL	10 µL	10 µL
Terminator (v1.1)	BRDG1-1000	1000	10 x 800 µL	8 x 2.0 mL	50 µL	50 µL
dGTP BrilliantDye®	BRDG3-100	100	800 µL	2.0 mL	10 µL	10 µL
Terminator (v3.1)	BRDG3-1000	1000	10 x 800 µL	8 x 2.0 mL	50 µL	50 µL
BrilliantDye® Terminator 5X Sequencing Buffer	BRB-100 BRB-110			1 mL 28 mL		

NimaPOP™ [page 2]

Analyzer Applied BioSystems™	NimaPOP™-4	NimaPOP™-6	NimaPOP™-7
NimaPOP™ for 3130 Series, 5 mL	NIP4-005	NIP6-005	NIP7-005
NimaPOP™ for 3130 Series, 10 mL	NIP4-010	NIP6-010	NIP7-010
NimaPOP™ for 310/3100 Series, 5 mL	NIP4-105	NIP6-105	N/A
NimaPOP™ for 310/3100 Series, 10 mL	NIP4-110	NIP6-110	N/A
NimaPOP™ for 3730 Series, 28 mL	N/A	NIP6-028	NIP7-028
NimaPOP™ for 3730 Series, 10 x 28 mL	N/A	NIP6-280	NIP7-280
NimaPOP™ for 3500 Series, 384 samples*	NIP4-384	NIP6-384	NIP7-384
NimaPOP™ for 3500 Series, 960 samples*	NIP4-960	NIP6-960	NIP7-960

^{*} Only compatible with 3500 data collection v1.0

NimaGen Capillary Electrophoresis Running Buffers		
Product	Part-no.	Quantity
NimaPOP™ 10x Running Buffer (with EDTA) for use with NimaPOP™ polymers	NIB-025	25 mL bottle
NimaPOP™ 10x Running Buffer (with EDTA) for use with NimaPOP™ polymers	NIB-100	100 mL bottle
NimaPOP™ 10x Running Buffer (with EDTA) for use with NimaPOP™ polymers	NIB-500	500 mL bottle
NimaPOP $^{\text{TM}}$ 10x Running Buffer for 3500 Series (Data Collection Software v1.0) incl. 4 x ABC & 4 x CBC self adhesive RFID chips	NIB-3500	60 mL bottle (10x buffer for 4 refills in total)



ExS-Pure [™] [page 3]

ExS-Pure ™		
Name	Description	P/N
ExS-Pure™ PCR Cleanup Kit	100 rxn	EXS-100
ExS-Pure™ PCR Cleanup Kit	500 rxn	EXS-500
ExS-Pure™ PCR Cleanup Kit	5000 rxn	EXS-5000

AmpliClean [™] [page 4]

AmpliClean™		
Name	Descr.	P/N
AmpliClean™ Cleanup Kit, Magnetic Beads	5 mL	AP-005
AmpliClean™ Cleanup Kit, Magnetic Beads	50 mL	AP-050
AmpliClean™ Cleanup Kit, Magnetic Beads	500 mL	AP-500
AmpliClean™ PB Cleanup Kit for PacBio SMRT®sequencing worklow	5 mL	APB- 005

D-Pure [™] [page 5]

D-Pure [™]			
Name		Description	P/N
D-Pure™ DyeTerminator Kit, Magnetic Beads	Cleanup	5 mL	DP-005
D-Pure™ DyeTerminator Kit, Magnetic Beads	Cleanup	50 mL	DP-050
D-Pure™ DyeTerminator Kit, Magnetic Beads	Cleanup	500 mL	DP-500

iX-Pure [™] [page 6]

iX-Pure ™		
Name	Description	P/N
iX-Pure™ DyeTerminator Cleanup Kit, Resin	100 preps	IXP-100
iX-Pure™ DyeTerminator Cleanup Kit, Resin	1000 preps	IXP-1000
iX-Pure™ DyeTerminator Cleanup Kit, Resin	2500 preps	IXP-2500
iX-Pure™ DyeTerminator Cleanup Kit, Resin	40000 preps	IXP-40K

Magnet Stands and Plates

Magnet Stands and Plates		
Name	Description	P/N
Tube Magnet Stand, 2 x 1.5 mL tubes NimaGen	1 pc	M000100
Microtube Magnet Stand, 12 x 0.2 mL tubes NimaGen	1 pc	M000200
MAGNUM FLX [®] Enhanced Universal Magnet Plate Alpaqua	1 pc	A000400
Magnum EX [™] Universal Magnet Plate Alpaqua	1 pc	A000380
96R Ring Magnet Plate Alpaqua	1 рс	A001219
96S Super Magnet Plate Alpaqua	1 pc	A001322
Low Elution Magnet Plate Alpaqua	1 pc	A000350
MagPlate 24 Alpaqua	1 pc	A000270
Magnum FLX ®24	1 pc	A000440
Catalyst™ 96	1 pc	A000550
384 Post Magnet Plate Alpaqua	1 pc	A001222
96M Magnum Plate Alpaqua	1 pc	A000250

Other Products for Capillary Electrophoresis [page 8]

ReCap™		
Name	Description	P/N
ReCAP™ Capillary Regeneration kit for 3130 Series Arrays (4 or 16 cap.)	4 reagents for regeneration of 1 capillary array	CAR- 3130
ReCAP™ Capillary Regeneration kit for 3730 Series Arrays (48 or 96 cap.)	4 reagents for regeneration of 1 capillary array	CAR- 3730

Seq-DI		
Name	Description	P/N
Seq-DI Formamide v2	25 mL	SDF-025
Seq-DI Formamide v2	250 mL	SDF-250

Fluorescent Internal Size Standards for Fragment Analysis [page 8]

DNA Size Standards		
Name	Descr.	P/N
Red-500 DNA Size Standard (500 bp)	400µl	DSMR-100
Orange-500 DNA Size Standard (500 bp)	400µl	DSMO-100
Orange-600 DNA Size Standard (600 bp)	400µl	DSMO-600
Red-600 DNA Size Standard (600 bp)	400µl	DSMR-600
Custom Size Standard, Orange or Red labeled	on request	DSMR-CS

BARCODE BIOSCIENCES

Barcode Biosciences (BBS) is one of the largest genomics facility in India, rendering services and offering products for researchers, academia, agriculture, healthcare, animal husbandry and many other related fields.

BBS was founded in the year 2018 by highly qualified and experienced professionals who are passionate about genomics.

BBS has been certified with ISO 9001:2015 and accredited by NABL.

BBS is strategically located in Bengaluru, the heart of R & D facility in India.

BBS is well-equipped with advanced equipments, qualified expertise to deliver optimal results for customers, research/studies, product evaluations.

BBS strives to uphold the principle of "Reliable service with Latest technology at a competitive price".

Unique Value Proposition

Accuracy of results

Adherence to Compliances

Data Integrity

At par with International Standards

Quick Turn-Around-Time

Reliable

NımaGen.

Product and Company Information

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Product Guide

DNASequencingandFragment $An alysis by {\it Capillary Electrophores} is$

Product Use

For Research Use Only

Version2.2-April2022

Legal Notice:

NimaGen, Brilliant Dyear eregistered trademarks of NimaGen B.V.D-Pure,AmpliClean,ExS-Pure,iX-Pure,ReCAP,Seq-Di,NimaPOPare trademarksofNimaGenB.V.

Seq Studio, ROX, LIZ are trade marks of Applied Bio Systems, LLC,a subsidiaryofThermoFisherScientiicInc.

Big Dye is a trade mark of Thermo Fisher Scientii clnc.

ExoSAP-ITisatrademarkofAfymetrix.

Alpaqua,MagnumFLX,MagnumEX,Catalyst,areregistered trademarksofAlpaquaEngineering,LLC.

SMRTisatrademarkofPaciicBiosciencesofCalifornia,Inc.





Barcode BioSciences Private Limited.

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