

Unrivaled Molecular Biology Workflow Solutions

Molecular Biology

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Find the high-quality products you need to support every stage of your molecular biology research through the Fisher Scientific channel. Our comprehensive assortment will drive your journey from discovery to validation of therapeutic treatments. Choose from a wide selection of workflow essentials from the most trusted brands in the industry.

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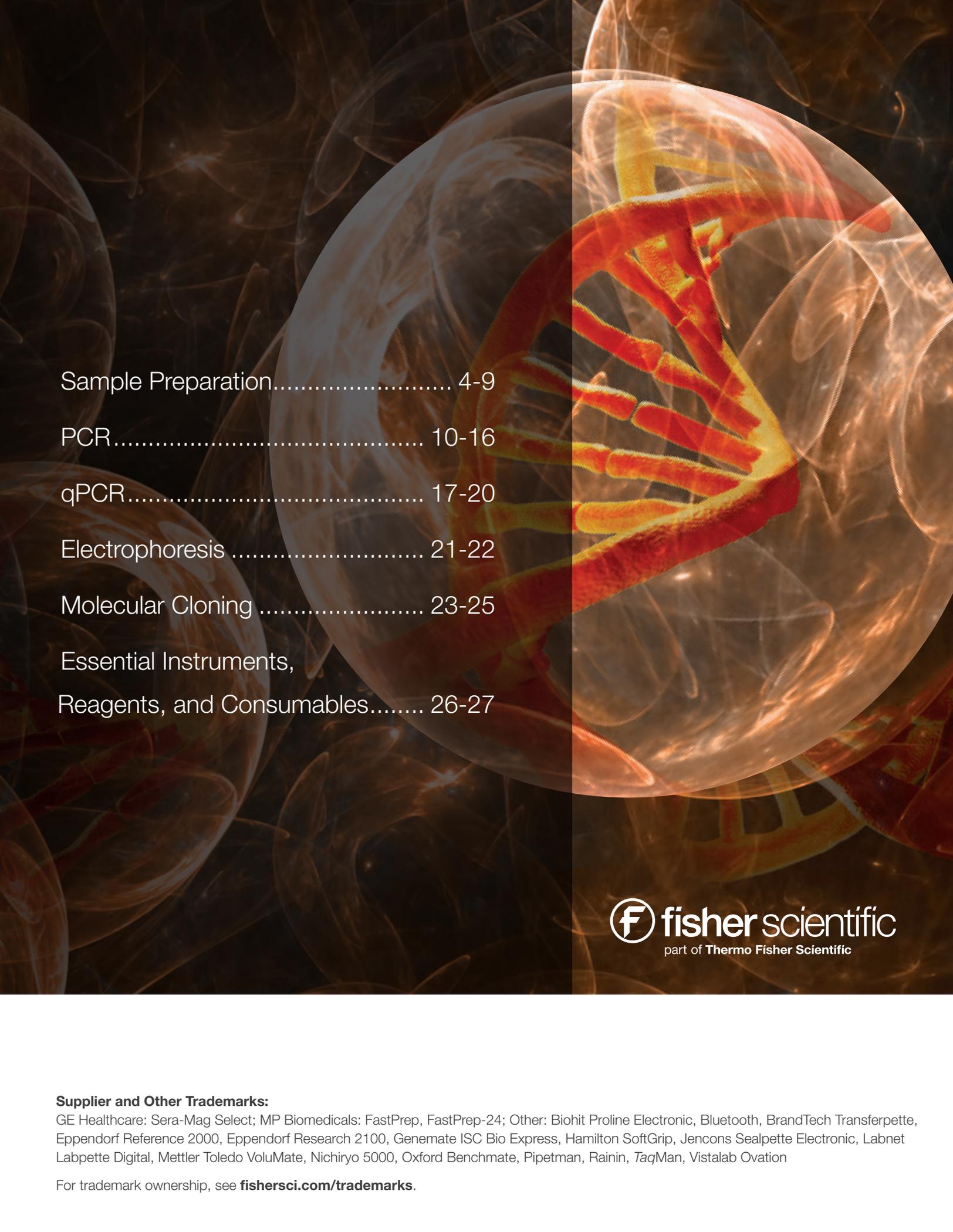
GE Healthcare

MP

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Supplier and Other Trademarks:

GE Healthcare: Sera-Mag Select; MP Biomedicals: FastPrep, FastPrep-24; Other: Biohit Proline Electronic, Bluetooth, BrandTech Transferpette, Eppendorf Reference 2000, Eppendorf Research 2100, Genemate ISC Bio Express, Hamilton SoftGrip, Jencons Sealpette Electronic, Labnet Labpette Digital, Mettler Toledo VoluMate, Nichiryo 5000, Oxford Benchmate, Pipetman, Rainin, TaqMan, Vistalab Ovation

For trademark ownership, see fishersci.com/trademarks.

Sample Preparation

Nucleic Acid Purification Essentials

MP Biomedicals FastPrep-24 5G Homogenizers

Homogenize, grind, or lyse tissues, soil, feces, cells, bacteria, and fungi with MP Biomedicals FastPrep-24 5G Homogenizer and specialized Lysing Matrix Tubes that help you quickly and efficiently purify high-quality DNA and RNA.



Description	Cat. No.
FastPrep-24 5G	11-600-5500

MP Biomedicals FastPrep Lysing Matrix Tubes

Choose from a wide variety of specialized Lysing Matrix Tubes that provide thorough homogenization and cell lysis of any sample.

- Choice of bead size and composition for optimized cell disruption
- 16 matrix compositions available in 2, 4.5, 15, and 50mL tubes, 96-well plates, or bulk quantities
- High reproducibility with controlled bead size and quantity, certified DNase- and RNase-free



Lysing Matrix	Contains	Use for
A	Garnet matrix, 6.3mm zirconium banded satellite	Animal tissues and cells, bacteria, yeasts and fungi, plant tissues and cells
B	0.1mm silica spheres	Gram-positive and gram-negative bacteria, bacterial spores, oocytes, prokaryotes, Archea
C	1mm silica spheres	Yeast and fungi, yeast and fungal spores, algae
D	1.4mm ceramic spheres	Plant and animal tissues, cultured cells, soft tissues
E	1.4mm ceramic spheres, 0.1mm silica spheres, 4mm glass beads	Soil, feces, environmental and waste water, sludge, pollen
F	1.6mm aluminum oxide granules, 1.6mm silicon carbide granules	Plant tissues, animal tissues, gram-positive and gram-negative bacteria, molds and fungi, coral emulsions, fixed samples
G	1.6mm aluminum oxide granules, 1.6mm silicon carbide granules	Plant tissues, animal tissues, gram-positive and gram-negative bacteria, molds and fungi, coral emulsions, fixed samples
H	2mm glass beads, 2mm yellow zirconium oxide beads	Plant and animal tissues, wood and seeds, bacterial aggregates, whole insects, ticks, fleas, ancient and dried samples
I	2mm yellow zirconium oxide beads, 4mm black ceramic beads	Plant and animal tissues, wood and seeds, very dense soils and clays, whole insects, ticks, fleas, ancient and dried samples, dry fungal spores/rusts
J	2mm yellow zirconia beads, 1.6mm aluminum oxide granules	Plant and animal tissues, gram-positive and gram-negative bacteria, fungi, coral emulsions, fixed samples, dry fungal spores/rusts
K	0.8mm zirconium silicate beads	Non-viable tissues, bone, preserved tissues, animal by-products, fungal and yeast spores
M	One 6.35mm diameter zirconium oxide banded satellite	Tough tissues, skeletal muscle, lung, heart, bone, seeds
S	Six 3.175mm stainless-steel grinding beads	Tough tissues, skeletal muscle, lung, heart, bone, seeds, spores
SS	6.35mm stainless-steel grinding balls	Tough tissues, skeletal muscle, lung, heart, bone, seeds, spores
Y	0.5mm diameter yttria-stabilized zirconium oxide beads	Gram-positive and gram-negative bacteria, yeast and fungi, yeast and fungal spores, algae, biofilms, yeasts with tougher cell walls
Z	2mm diameter yttria-stabilized zirconium oxide beads	Plant and animal tissues, wood and seeds, very dense soils and clays, bacterial aggregates, whole insects, ticks, fleas

Visit fishersci.com/lysing-matrix-tubes or fishersci.ca/lysing-matrix-tubes to view catalog numbers.

Thermo Scientific KingFisher Duo Prime Purification System

Reap high yields of quality nucleic acids from a variety of starting materials with the Thermo Scientific KingFisher Duo Prime automated purification system.

Recommended for DNA and RNA isolation from various starting materials, proteomic applications, and cell isolation.



Description	Mfr. No.	Cat. No.
KingFisher Duo Prime Purification System	5400110	14-387-700

Applied Biosystems MagMAX Bead-Based Kits for Automated Nucleic Acid Purification

Discover MagMAX technology and the power of magnetic bead-based kits for nucleic acid purification. Purify high-quality nucleic acids from a variety of sample types. Save time and increase consistency by using with KingFisher instruments for automated sample purification.



Description	Mfr. No.	Cat. No.
MagMAX DNA Multi-Sample Ultra 2.0 Kit	A36570	A36570
MagMAX Saliva gDNA Isolation Kit	A39060	A39060
MagMAX Cell-Free DNA Isolation Kit	A29319	A29319
MagMAX FFPE DNA/RNA Ultra Kit	A31881	A31881
MagMAX Microbiome Ultra Nucleic Acid Isolation Kit	A42357, A42358	A42357, A42358
MagMAX Viral/Pathogen Nucleic Acid Isolation Kit	A42352	A42352
MagMAX Viral/Pathogen Ultra Nucleic Acid Isolation Kit	A42356	A42356
Dynabeads mRNA DIRECT Purification Kit	61011	61-011-LS

Invitrogen Qubit 4 Fluorometers and Starter Kits

The Invitrogen Qubit 4 Fluorometer is the next generation of benchtop analyzer to measure DNA, RNA, and protein. It also measures RNA integrity and quality, and has easy-to-use touchscreen menus and result displays.

- Sample size as small as 1 μ L
- More sensitive than UV absorbance-based quantification
- Quantifies DNA, RNA, and protein in <3 seconds per sample
- Results reporting options include Wi-Fi, USB drive, or direct connection (USB cable)
- New integrated reagent calculator reports the amounts of dye and buffer needed



Description	Quantity	Cat. No.
Invitrogen Qubit 4 Fluorometers	Each	Q33226
Invitrogen Qubit 4 Quantitation Starter Kits: Qubit 4, Assay Tubes; Qubit 1X dsDNA HS, dsDNA BR, RNA IQ, RNA HS, RNA XR; and Protein Assay Kits	Each	Q33227
Invitrogen Qubit 4 NGS Starter Kits: Qubit 4, Assay Tubes and Qubit 1X dsDNA HS Assay Kit	Each	Q33228
Invitrogen Qubit 4 RNA IQ Starter Kits: Qubit 4, Assay Tubes and Qubit RNA IQ Assay Kit	Each	Q33229

Thermo Scientific NanoDrop One Microvolume Spectrophotometers

Get fast, accurate DNA, RNA, and protein quantitation with only 1–2 μL of sample to maximize your productivity. These next-generation spectrophotometers feature Thermo Scientific Acclaro Sample Intelligence Software to help you understand the quality of your sample before you use it in downstream applications. Additional benefits include:

Prevent costly delays: Identify contaminants, obtain corrected concentrations, and enjoy success in your downstream applications

Collect data fast: Auto-Blank and Auto-Measure modes save time while organizing data

Save bench space: User-friendly local control with sleek, standalone design means no PC required

- Full spectrum microvolume UV-Vis spectrophotometer with 190nm to 850nm wavelength measurement range
- Sample vol 1.0 to 2.0 μL
- Measurement range 2 to 27500ng/ μL dsDNA
- Column integrity sensor
- Tilting and sliding screen
- 2-year warranty



Description	Quantity	Cat. No.
Thermo Scientific NanoDrop One Microvolume Spectrophotometers	Each	13-400-518

Invitrogen PureLink Column-Based DNA/RNA Purification

Invitrogen PureLink spin columns feature a unique silica membrane to produce high yields of sequencing-grade plasmid DNA. Cells are first lysed, then the lysate is applied to the PureLink column, which selectively binds plasmid DNA. Contaminants are removed with a wash, and the plasmid DNA eluted from the column can be used for further testing.

The HiPure technology uses a patented anion-exchange chromatography resin composed of small, uniformly sized particles to produce high yields of very pure plasmid DNA.



Description	Quantity	Cat. No.
Invitrogen PureLink Quick Plasmid Miniprep Kit	50 Preps	K210010
	250 Preps	K210011
Invitrogen PureLink HiPure Plasmid Filter Midiprep Kit	25 Preps	K210014
	50 Preps	K210015
Invitrogen PureLink HiPure Plasmid Filter Maxiprep Kit	10 Preps	K210016
	25 Preps	K210017
Invitrogen PureLink HiPure Plasmid Miniprep Kit	25 Preps	K210002
Invitrogen PureLink HiPure Plasmid Midiprep Kit	25 Preps	K210004
Invitrogen PureLink HiPure Plasmid Maxiprep Kit	10 Preps	K210006
Invitrogen PureLink HiPure Expi Plasmid Megaprep Kit	4 Preps	K210008XP
Invitrogen PureLink HiPure Expi Plasmid Gigaprep Kit	2 Preps	K210009XP
Invitrogen PureLink Viral DNA/RNA Mini Kit	50 Preps	12-280-050
Invitrogen PureLink Pro 96 Viral RNA/DNA Purification Kit	96 Preps	12-280-096A
Invitrogen PureLink RNA Mini Kits	10 Preps	12-183-020
	50 Preps	12-183-018A
	250 Preps	12-183-025

Chemicals and Reagents

Invitrogen TRIzol Reagents and Tubes

Isolate high-quality RNA, DNA, and protein from human, animal, plant, yeast, or bacterial cell or tissue samples within an hour with Invitrogen TRIzol Reagents. Their RNase inhibition helps to maintain RNA integrity during sample homogenization, so you can process many samples simultaneously. Or use TRIzol reagents to sequentially precipitate RNA, DNA, and protein from a single sample.

Invitrogen Phasemaker tubes contain an inert polymer to separate and isolate the aqueous and organic phases of the TRIzol mix, making it easier to remove the phase containing the RNA and increasing your yield by up to 30%.



Description	Quantity	Cat. No.
TRIzol Reagent	100mL	15-596-026
TRIzol LS Reagent	100mL	10-296-010
Phasemaker Tubes, 2mL	100/Pack	A33248

Invitrogen RNase-Free Decontaminants, Reagents, and Labware

- RNaseZAP decontamination solution and wipes help you remove RNase from your work environment to prevent contamination
- SUPERase•In and RNaseOUT inhibitors and RNA_{later} solutions preserve sample quality
- RNase-free pipette tips, microtubes, and conical centrifuge tubes help keep your results true



Description	Quantity	Cat. No.
Invitrogen RNaseZap RNase Decontamination Solution	250mL	AM9780
Invitrogen RNaseZap RNase Decontamination Wipes, Pop-Up Dispenser	100 Sheets	AM9786
Invitrogen SUPERase•In RNase Inhibitor	2,500 Units	AM2694
Invitrogen RNaseOUT Recombinant Ribonuclease Inhibitor	5,000 Units	10-777-019
Invitrogen RNA _{later} Stabilization Solution	100mL	AM7020
Invitrogen RNA _{later} -ICE Frozen Tissue Transition Solution	25mL	AM7030
Invitrogen Pipette Tips, RNase-Free Barrier (Filter), 100µL	10 x 96/Pack	AM12648
Invitrogen Microfuge Tubes, RNase-Free, Graduated, 0.5mL	1,000/Case	AM12300
Invitrogen Conical Centrifuge Tubes, RNase-Free, PP, 15mL, Racked	500/Pack	AM12500

PCR

Elevate Your PCR

Which PCR instrument fits your needs?

Applied Biosystems Thermal Cyclers offer precise and consistent results with options for every challenge, application, and budget. These products are built on a reputation of reliability, accuracy, and ease of use.

When you need:	High flexibility and throughput	Simplicity and precision	Proven reliability and precise PCR optimization	Routine PCR, elevated	Routine PCR	Easy robotic integration
We recommend:	ProFlex PCR System	SimpliAmp Thermal Cycler	Veriti Thermal Cycler ¹	MiniAmp Plus Thermal Cycler	MiniAmp Thermal Cycler	Automated Thermal Cycler



Max. sample throughput	480,000 reactions	96 reactions	384 reactions	96 reactions	96 reactions	384 reactions
Max. block ramp rate	6°C/sec	4°C/sec	5°C/sec	3.5°C/sec	3°C/sec	3.5°C/sec
Block formats (temperature optimization)	<ul style="list-style-type: none"> • Triple 32-well² • 96-well³ • Dual 96-well • Dual flat block • Dual 384-well 	<ul style="list-style-type: none"> • 96-well⁴ 	<ul style="list-style-type: none"> • 96-well³ • Fast 96-well • 384-well • 60-well 	<ul style="list-style-type: none"> • 96-well⁴ 	<ul style="list-style-type: none"> • 96-well 	<ul style="list-style-type: none"> • 96-well⁵ • 384-well

¹ Also available as an FDA Class 1/CE-IVD labeled device.

² 2-zone VeriFlex Block

³ 6-zone VeriFlex Block

⁴ 3-zone VeriFlex Block

⁵ Compatible with semi- or full-skirted plates.

 = cloud-enabled instrument

Visit fishersci.com/PCRdemo or fishersci.ca/PCRdemo to learn more and to request a demo.

Find Your PCR Plastic Fit



Find the Applied Biosystems PCR plastics with the format and features that best fit your application.

Product

Cat. No.

Product	Cat. No.	3 x 32-Well		96-Well		96-Well Fast	384-Well		Genetic analyzers		
		ProFlex		ProFlex, SimpliAmp, Veriti, MiniAmp Plus, MiniAmp	2720	9700	Veriti	ProFlex, Veriti	9700	810	3130, 3130xl, 3500, 3500xl, 3730, 3730xl
96-Well (0.2mL) Reaction Plates											
Optical Plates	N8010560, 43-168-13			•	•	•					•
Optical Plates with Barcode	43-067-37, 43-266-59			•	•	•					•
Plates with Barcode & Optical Caps	40-301-2			•	•	•					
Optical Plates with Barcode & Optical Adhesive Films	43-143-20			•	•	•					
EnduraPlate Optical Clear Plates with Barcode*	44-833-54, 44-833-52			•	•	•					•
TriFlex 3 x 32-Well Reaction Plates	A32810, A32811	•••		•	•	•					
96-Well (0.1mL) Reaction Plates											
Fast Optical 96-Well Plates	43-469-07					•				•	•
Fast Optical Plates with Barcode, 0.1mL	43-469-06, 43-669-32					•				•	•
EnduraPlate Optical Clear Plates with Barcode*	44-834-85, 44-834-94					•				•	•
384-Well Reaction Plates											
Optical Plates	43-433-70						•	•			•
Optical Plates with Barcode	43-098-49, 43-262-70, 43-438-14						•	•			•
EnduraPlate Optical Clear Plates with Barcode*	44-832-85, 44-832-73						•	•			•
Strip Tubes and Caps											
Fast 8-Tube Strips, 0.1mL	43-582-93					•					
Optical 8-Tube Strip with Attached Optical Caps, 0.2mL	A30588	•		•	•	•					
8-Tube Strip with Attached Domed Caps, 0.2mL	A30589	•		•	•	•					
8-Tube Strips, 0.2mL*	N8010580	•		•	•	•				•	
Optical 8-Tube Strips, 0.2mL	43-165-67	•		•	•	•					
8-Cap Strips*	N8010535, N8011535	•		•	•	•	•				
Optical 8-Cap Strips	43-230-32	•		•	•	•					
12-Cap Strips*	N8010534, N8011534			•	•	•	•				
Single Tubes											
Fast Reaction Tubes with Cap, 0.1mL	43-582-97, 43-582-93					•					
Reaction Tubes with Cap, 0.2mL*	N8010540, N8010612, N8011540	•		•	•	•					
Reaction Tubes without Cap, 0.2mL*	N8010533, N8011533	•		•	•	•					
Optical Tubes without Cap, 0.2mL	N8010933	•		•	•	•					
Seals and Covers											
Clear Adhesive Film	43-063-11			•	•	•	•	•			
Optical Adhesive Film	43-609-54, 43-119-71			•	•	•	•	•			
Full 96-Well Plate Covers	N8010550			•	•						
Clear 32-Well Plate Adhesive Film	A32812	•••		•	•	•					
Accessories											
Splash-Free 96-Well Base	43-120-63			•	•	•	•				
96-Well Support Base	43-795-90			•	•	•	•				•
96-Well Base	N8010531			•	•	•					
96-Well Reaction Tube/Tray/Retainer Set, 0.2mL	40-308-3, 40-308-6				•	•					

* Multiple colors are available.
 ** Do not use MicroAmp 3 x 32-Well Retainer.

Note: If you are using only one or two 8-tube strips/caps, add empty tube strips to balance the pressure of the lid against block, or use the MicroAmp 96-Well Tray/Retainer Set (Cat. No. 43-818-50) for the bottom part of the tray only. For use with 96-well block of Applied Biosystems ProFlex, SimpliAmp and Veriti, MiniAmp Plus and MiniAmp Thermal Cyclers.

Invitrogen Platinum SuperFi DNA Polymerase

Ultimate Accuracy and Robustness

High-fidelity Invitrogen Platinum SuperFi DNA Polymerase is ideal for cloning, mutagenesis, long PCR, and other applications that benefit from superior sequence accuracy.

- Exceptional fidelity — more than 100x more accurate than *Taq* polymerase
- Robust and versatile — ideal for difficult targets (long amplicons, suboptimal purity, GC-rich amplicons)
- Platinum hot-start technology — provides superior specificity, sensitivity, and yields with room-temperature setup

Visit thermofisher.com/platinumsuperfi to learn more.



Description	Size	Cat. No.
Platinum SuperFi DNA Polymerase	100 Units	12-351-010
Platinum SuperFi Green DNA Polymerase	100 Units	12-357-010
Platinum SuperFi PCR Master Mix	100 Reactions	12-358-010
Platinum SuperFi Green PCR Master Mix	100 Reactions	12-359-010

Invitrogen *Taq* PCR Enzymes for Standard PCR Applications

Great for genotyping, colony PCR, and routine PCR applications.

Isolated from the thermophilic bacterium *Thermus aquaticus*, *Taq* DNA polymerase is one of the best-known thermostable DNA polymerases used in PCR amplification of DNA targets.



Description	Size	Cat. No.
<i>Taq</i> DNA Polymerase, Recombinant	500 Units	10-342-020
<i>Taq</i> DNA Polymerase, Native	500 Units	18-038-042

Invitrogen Platinum II Hot Start DNA Polymerase

Faster, Easier PCR

Invitrogen Platinum II *Taq* Hot-Start DNA Polymerase is designed for universal primer annealing and fast, easy PCR. It offers a unique combination of innovative buffer, high-performance *Taq*, and leading Hot-Start technology.

- Engineered *Taq* — confers fast cycling and resistance to common inhibitors
- Innovative buffer — enables universal primer annealing protocol by isostabilizing primer-template duplex structures
- Platinum Hot-Start technology — enables superior specificity, sensitivity, and yields, plus room-temperature setup



Description	Size	Cat. No.
Platinum II <i>Taq</i> Hot-Start DNA Polymerase	100 Reactions	14-966-001
Platinum II Hot-Start PCR Master Mix (2X)	50 Reactions	14-000-012
Platinum II Hot-Start Green PCR Master Mix (2X)	50 Reactions	14-001-012

**Request
a Sample**

Try Invitrogen Platinum II Hot-Start

Visit fishersci.com/lifesamples or fishersci.ca/lifesamples to request your sample.
Excludes healthcare customers.

Reverse Transcription

Invitrogen SuperScript IV Reverse Transcriptase

Designed to deliver superior performance with the most challenging samples, Invitrogen SuperScript IV Reverse Transcriptases are engineered to provide higher performance than other RT enzymes.

- Super efficient — up to 100x higher cDNA yields than with other RT enzymes
- Super sensitive — transcribes from degraded or inhibitor-containing RNA or low-input amounts
- Super robust — high thermostability and processivity
- Super fast — 10-minute cDNA synthesis protocols

Use the selection guide below to find the best SuperScript IV format for your research needs.

Would you like to have the ability to optimize reaction components and conditions?	... a complete kit with all cDNA synthesis reaction components?	... ultimate convenience and minimal pipetting steps for RT-PCR?
Product Type	Stand-Alone Enzyme	First-Strand cDNA Synthesis Kit	One-Step RT-PCR Kit
Recommended Product	SuperScript IV Reverse Transcriptase	SuperScript IV First-Strand Synthesis System	SuperScript IV One-Step RT-PCR System
Applications	RT-PCR, RT-qPCR, sequence detection, gene expression analysis, transcript variant detection, cloning, cDNA library construction, RACE, RNA-Seq	RT-PCR, RT-qPCR, sequence detection, gene expression analysis, transcript variant detection, cloning, cDNA library construction, RACE, RNA-Seq	RT-PCR, sequence detection, cloning, genotyping, high-throughput analysis
Input Total RNA	1pg to 5µg	1pg to 5µg	0.01pg to 1µg
Optimal Reaction Temperature	50° to 55°C	50° to 55°C	50° to 55°C
Reaction time	10 minutes	10 minutes	10 minutes
cDNA Synthesis with Challenging or Degraded DNA	Yes	Yes	Yes

Description	Size	Cat. No.
SuperScript IV Reverse Transcriptase	2,000 Units	18-090-010
	10,000 Units	18-090-050
	4 x 10,000 Units	18-090-200
SuperScript IV First-Strand Synthesis System	50 Reactions	18-091-050
	200 Reactions	18-091-200
SuperScript IV One-Step RT PCR System	25 Reactions	12-594-025
	100 Reactions	12-594-100
SuperScript IV One-Step RT PCR Systems with ezDNase Enzyme	50 Reactions	12-595-025
	500 Reactions	12-595-100

Request a Sample

Try SuperScript IV Reverse Transcriptase

Visit fishersci.com/lifesamples or fishersci.ca/lifesamples to request your sample.

Excludes healthcare customers.

PCR Essentials

Find the essentials you need for reliable PCR.

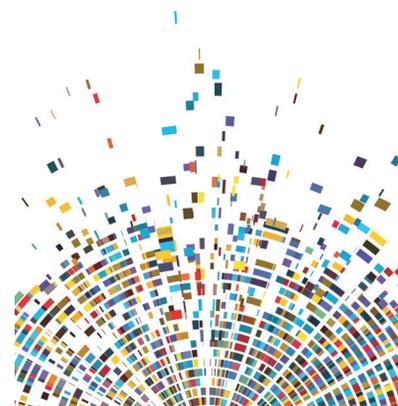
Oligonucleotides

Custom DNA Oligos offer the flexibility and affordability you need for successful PCR. Take advantage of more than 20 years of customer service experience and use the simple primer design interface to create your oligos.

- Purity options include desalted, cartridge, HPLC, and PAGE
- Scale includes 25, 50, and 200nmol; 1 and 10µmol
- Affordable pricing

Visit fishersci.com/oligos to order now.

**Depending on region. Available to U.S. customers only.*



PCR Clean-Up

New GE Healthcare Sera-Mag Select

Available exclusively through the Fisher Scientific channel.

Sera-Mag Select PCR Clean-Up and Size Selection Reagent is a ready-to-use formulation that combines the binding characteristics of Sera-Mag Carboxyl Speedbeads with an optimized binding solution.

Adjust the amount of reagent to tailor the size of the isolated DNA to produce fragments for use with next-generation sequencing (NGS) and PCR clean-up.



Quantity	Cat. No.
5mL	09-928-106
60mL	09-928-107
450mL	09-928-108

New GE Healthcare SeraSil-Mag Silica Coated Superparamagnetic Beads

Available exclusively through the Fisher Scientific channel.

SeraSil-Mag Silica Beads provide an optimal surface for nucleic acid binding with high performance and low background to produce high-purity DNA extractions for NGS procedures. Use for chaotropic salt chemistry and vortex mixing, roller mixing, and sonication applications.



Particle Diameter	Quantity	Cat. No.
400nm	5mL	09-928-102
	60mL	09-928-103
700nm	5mL	09-928-104
	60mL	09-928-105

Applied Biosystems ExoSAP-IT Express PCR Product Clean-Up Reagent

ExoSAP-IT *Express* PCR Product Clean-Up Reagent removes excess primers and unincorporated nucleotides from your PCR reactions. This enzymatic clean-up method offers precision, increased yield, and a faster turnaround time than spin columns, beads, or other purification methods.



Description	No. of Reactions	Volume	Cat. No.
Clean-Up Reagent	100	200µL	75-001-200UL
	480	8-Tube Strip	75-001-1EA
	500	1mL	75-001-1ML
	2,000	4 x 1mL	75-001-4X1ML
	5,000	10mL	75-001-10ML

Applied Biosystems PCR Pre-Sequencing Kit

The PCR Product Pre-Sequencing Kit uses a novel, enzymatic method to pre-treat PCR products prior to sequencing, without any subsequent purification or separation steps.



Particle Diameter	Quantity	Cat. No.
Pre-Sequencing Kit	500 Reactions	70-996-1KT

qPCR

Real-Time PCR (qPCR) Instruments

With trusted Applied Biosystems Real-Time PCR Systems, you'll find everything you need to achieve qPCR success.

Applied Biosystems QuantStudio Real-Time PCR Instruments

Take Your Work to the Next Level

The Applied Biosystems QuantStudio Real-Time PCR portfolio offers solutions for everyone. Whether you're looking for versatility on a budget, reliable results from limited samples, high throughput for maximum productivity, or absolute answers that take your work to the next level, there's a QuantStudio System that's right for your research.



Description	Cat. No.		
	96-Well 0.1mL Block	96-Well 0.2mL Block	384-Well Block
QuantStudio 3 qPCR System	A28136	A28137	N/A
QuantStudio 5 qPCR System	A28138	A28139	A28140
	96-Well Block	384-Well Block	TaqMan Array Card
QuantStudio 6 qPCR System	44-856-99	44-856-91	N/A
QuantStudio 7 qPCR System	44-856-90	44-857-01	44-856-96
QuantStudio 12K qPCR System	44-710-87	44-711-34	44-710-89
QuantStudio 3D Digital PCR System	44-890-84	N/A	N/A

Visit fishersci.com/lifesciencedemos or fishersci.ca/lifesciencedemos to learn more and to request a demo.

qPCR Reagents

Applied Biosystems PowerUp SYBR Green Master Mixes

Applied Biosystems PowerUp SYBR Green Master Mix is a pre-formulated, optimized, universal 2X master mix for real-time PCR workflows. Coupled with user-supplied primer sets and templates, PowerUp SYBR Green Master Mix is designed to amplify targets for accurate gene expression analysis.

Features include:

- A dual Hot-Start mechanism for excellent specificity
- Highly reproducible Ct results over a broad dynamic range
- Formulated with UNG/dUTP to prevent contamination of carryover
- Stable at room temperature for 72 hours after plates are prepared



Description	Size	Cat. No.
Power Up SYBR Green Master Mix	1mL	A25741
Power Up SYBR Green Master Mix	5mL	A25742
Power Up SYBR Green Master Mix	50mL	A25743
Power Up SYBR Green Master Mix	2 x 5mL	A25776
Power Up SYBR Green Master Mix	5 x 5mL	A25777
Power Up SYBR Green Master Mix	10 x 5mL	A25778
Power Up SYBR Green Master Mix	2 x 1mL	A25779
Power Up SYBR Green Master Mix	5 x 1mL	A25780
Power Up SYBR Green Master Mix	10 x 1mL	A25918

Applied Biosystems TaqMan Fast Advanced Master Mix

Applied Biosystems TaqMan Fast Advanced Master Mix delivers shorter run times (<40 minutes) while maintaining superior sensitivity, accuracy, and linear dynamic range.

Features include:

- Stable at room temperature for 72 hours after plates are prepared
- Optimized for gene expression analysis in single and multiplex
- Reduced run times (<40 minutes) in fast mode
- Validated for use with TaqMan Gene Expression Assays and TaqMan Array Plates (see next page)



Description	Size	Cat. No.
TaqMan Fast Advanced Master Mix	2 x 5mL	44-449-63
TaqMan Fast Advanced Master Mix	5 x 5mL	44-449-64

qPCR Assay and Array Solutions

All-inclusive predesigned assays and preconfigured arrays that deliver outstanding results.

TaqMan Gene Expression Predesigned Assays

Applied Biosystems *TaqMan* Assays are sensitive, specific, and easy to use. Each assay includes your target primers and a sequence-specific probe optimized for the best functional assay performance. No additional design, optimization, or melt analysis is needed.

Description	Size	Cat. No.
<i>TaqMan</i> Inventoried Assay, XS	75 Reactions	44-488-92
<i>TaqMan</i> Inventoried Assay	250 Reactions	43-311-82
<i>TaqMan</i> Made-to-Order Assay	360 Reactions	43-513-72

Ordering *TaqMan* Assays Online

If you are placing the order yourself, click the add to cart button and check out.

If you are not placing the order yourself, two pieces of information are required to order:

1. Catalog number
2. Assay ID

The catalog number only defines configuration (e.g., assay type, size, dye) and does not define the primer/probe sequences.

The assay ID is a unique, alphanumeric string that identifies the specific primer and probe set.

Visit fishersci.com/taqmanassays to learn more.



TaqMan Array Plates

Applied Biosystems *TaqMan* Array Plates contain preselected *TaqMan* Gene Expression Assays and endogenous controls in 96-well fast and standard formats for the study of specific pathways, biomarkers, or disease states. Choose from hundreds of pre-designed plates.



Description	Cat. No.
Human Cell Surface Markers, Fast	44-187-54
Human Cellular Apoptosis Pathway, Fast	44-187-62
Human Chemokines, Standard	44-140-84
Human DNA Repair Mechanism, Standard	44-141-28
Human Drug Transporters, Fast	44-187-63
Human Endogenous Control Plate, Standard	43-968-40
Human Endogenous Control Plate, Fast	44-267-00
Human Extracellular Matrix and Adhesion Molecules, Fast	44-187-78
Human Immune Response, Standard	44-140-73
Human Inflammation, Standard	44-140-74
Human Inflammation, Fast	44-187-19
Human Neurotransmitter, Standard	44-140-94
Human Osteogenesis, Standard	44-140-96
Human PDGF Pathway, Fast	44-188-16
Human Stem Cell Pluripotency, Fast	44-187-22
Human Tumor Metastasis, Fast	44-187-43
Human WNT Pathway, Fast	44-187-45
Mouse Endogenous Control Plate, Standard	44-267-01
Mouse Immune Response, Standard	44-140-79
Mouse Immune Response, Fast	44-187-24

Visit fishersci.com/TaqManArrays or fishersci.ca/TaqManArrays to find more *TaqMan* Array Plates.

Electrophoresis

Fisherbrand Horizontal Electrophoresis Systems

Choose from multiple formats:

- Minigel System
 - For quick screening
 - Run up to 16 samples with supplied combs or up to 24 samples with accessory combs
- Midigel Systems
 - Buffer recirculation option prevents ionic depletion on long runs, keeps ionic gradients stable, and prevents pH changes
- Run up to 32 samples with combs supplied or up to 48 samples with accessory combs
- Large Gel Systems
 - Improve northern and Southern blot resolution
 - Buffer recirculation option prevents ionic depletion on long runs, keeps ionic gradients stable, and prevents pH changes
- Run up to 36 samples with supplied combs
- Wide-Format System
 - Run 25 to 250 samples simultaneously on one gel
 - Produces clear, tight banding patterns with no “smiling”
 - Use with microwell-format combs (included) and load samples directly from a 96-well plate



System Size	Gel Dimensions	Buffer Volume	Cat. No.
Minigel	7 x 10cm	400mL	FB-SB-710
Midigel	13 x 16cm	800mL	FB-SB-1316
Midigel	13 x 16cm	1200mL	FB-SBR-1316
Large	20 x 25cm	2L	FB-SBR-2025
Large	20 x 25cm	2.3L	FB-SB-2025
Wide Format	18 x 23cm	1.2L	FBSB2318

Fisher Bioreagents Products for Electrophoresis

Description	Quantity	Cat. No.
Acrylamide	100g	BP170100
	500g	BP170500
	5kg	BP1705
Agarose, Molecular Biology	100g	BP160100
	500g	BP160500
Agarose, Genetic Analysis	100g	BP1356100
	500g	BP1356500
Glycine	500g	BP381500
	1kg	BP3811
	5kg	BP3815
Tris Base	500g	BP152500
	1kg	BP1521
	5kg	BP1525
	10kg	BP15210
	25kg	BP15225

Fisherbrand Gel-Loading Aerosol-Barrier Tips

Natural color with no RNase or DNase contamination.



Volume	Packaging	Cat. No.
20µL	Bulk	02-707-169
20µL	Racked	02-707-171
100µL	Bulk	02-707-172
100µL	Racked	02-707-174
10µL	Racked	02-707-175

For use with, but not limited to: Biohit Proline Electronic, BrandTech Transferpette, Eppendorf Reference 2000, Eppendorf Research 2100, Thermo Finnpipette Focus, Fisherbrand Finnpiptette, Fisherbrand Finnpiptette II, Genemate ISC Bio Express, Hamilton SoftGrip, Jencons Sealpette Electronic, Labnet Labpette Digital, Mettler Toledo VoluMate, Nichiryo 5000, Oxford Benchmate, Pipetman, Rainin, and Vistalab Ovation.

Molecular Cloning

Clone, Analyze, Transform, Purify

Accelerate your next discovery with high-quality cloned DNA. From restriction enzymes to sample analysis, find a comprehensive portfolio of tools and resources to help save you time and money.

Analyze

The Invitrogen Anza Restriction Enzyme Cloning System is a complete system, comprised of 128 restriction enzymes and five DNA modifying enzymes. All Anza restriction enzymes work together cohesively and are fully functional with the single Anza buffer.

Invitrogen Anza Restriction Enzyme Starter Kits

Find a complete, one-buffer system of restriction enzymes and DNA-modifying enzymes for beautifully simple cloning.



Description	Cat. No.
5-Pack Starter Kit Includes: Anza 1 NotI, Anza 5 BamHI, Anza 11 EcoRI, Anza 12 XbaI, Anza 16 HindIII, Anza T4 DNA Ligase Master Mix, Anza Alkaline Phosphatase, Anza 10X Buffer, Anza 10X Red Buffer	IVGN3004
10-Pack Starter Kit Includes: Anza 19 BglII, Anza 26 Eco32I, Anza T4 DNA Ligase Master Mix, Anza Alkaline Phosphatase, Anza 10X Buffer, Anza 10X Red Buffer	IVGN3006

Anza DNA Modifying Enzymes

Complete your additional cloning steps with ease. The Anza restriction enzyme cloning system is comprehensive and includes additional Anza DNA modifying enzymes that are fully functional with the Anza buffer.

Description	Quantity	Cat. No.
10x Buffer Set	1 Set	IVGN2008
T4 DNA Ligase Master Mix	50 Reactions	IVGN2104
	200 Reactions	IVGN2108
Alkaline Phosphatase	500 Reactions	IVGN2204
	2,000 Reactions	IVGN2208
T4 PNK Kit	50 Reactions	IVGN2304
DNA Blunt End	100 Reactions	IVGN2404
DNA End Repair Kit	20 Reactions	IVGN2504

TOPO Cloning

For the past twenty years, the Invitrogen TOPO brand has been synonymous with PCR cloning quality and innovation.

- Five-minute, room temperature reaction
- Add restriction and/or universal primer sites to either end in just three easy steps
- Up to 95% of clones will contain desired insert
- Available in formats and sizes to suit your polymerase choice



Description	Cat. No.
TOPO TA Cloning Kit for Subcloning, without Competent Cells	450641
Zero Blunt TOPO PCR Cloning Kit, without Competent Cells	450245
Zero Blunt TOPO PCR Cloning Kit, with One Shot TOP10 Chemically Competent <i>E. coli</i>	K287540

Transform

Invitrogen One Shot Competent Cells

The right competent cells are a critical component of your cloning applications and workflow success. Consider these aspects when selecting your competent *E. coli* strain:

- Transfection method: chemical vs. electroporation
- Transformation efficiency: bacterial strain and genotype
- Downstream applications: protein expression, library production, general cloning



Description	Cat. No.
Invitrogen Competent Cell Sampler	A10469
One Shot TOP10 Chemically Competent <i>E. coli</i>	C404003

Purify

Thermo Scientific GeneJET Plasmid Prep Kits

Thermo Scientific GeneJET Plasmid Prep Kits utilize an exclusive silica-based membrane technology in the form of a convenient spin column to recover high copy plasmid DNA. Choose, mini-, midi-, or maxi-prep kits.

- High yields of high-quality plasmid DNA
- Procedure takes less than 14 minutes
- Does not require a phenol/chloroform extraction or alcohol precipitation
- Purified DNA is ready for immediate use



Description	Cat. No.
Thermo Scientific GeneJET Plasmid Miniprep Kit	FERK0503
Thermo Scientific GeneJET Plasmid Midiprep Kit	FERK0481
Thermo Scientific GeneJET Plasmid Midiprep Kit	FERK0482
Thermo Scientific GeneJET Plasmid Maxiprep Kit	FERK0491
Thermo Scientific GeneJET Plasmid Maxiprep Kit	FERK0492

Analyze

Invitrogen E-Gel Power Snap Electrophoresis System

Simplify your DNA electrophoresis with an integrated gel running and imaging platform.

The Invitrogen E-Gel Power Snap Electrophoresis System combines rapid, real-time nucleic acid analysis with high-resolution image capture.

- From sample loading to image capture in as little as 15 minutes
- Intuitive user interface with large touchscreen and integrated operating system
- Minimize hazardous chemical handling with Invitrogen E-Gel precast gel cassettes



Description	Cat. No.
Power Snap Electrophoresis System Starter Kit, EX 2%	G8342ST
Power Snap Electrophoresis Device Starter Kit, EX 1%	G8141ST
Power Snap Electrophoresis Device Starter Kit, SYBR Safe 1.2%	G8151ST
Power Snap Electrophoresis Device Starter Kit, SYBR Safe 2%	G8152ST
Power Snap Electrophoresis Device Starter Kit, CloneWell	G8168ST
Power Snap Electrophoresis Device Starter Kit, SizeSelect	G8162ST
Power Snap Electrophoresis System Starter Kit, EX, 2%	G8342ST
Power Snap Electrophoresis System Starter Kit, SYBR Safe, 1.2%	G8351ST
Power Snap Electrophoresis System Starter Kit, SYBR Safe, 2%	G8352ST

Essential Instruments, Reagents, and Consumables

Thermo Scientific E1-ClipTip Bluetooth Electronic Pipettes

Automate daily pipetting tasks with enhanced versatility, customization, and tip security. Electronic tip ejection and index finger pipetting action make these pipettes ideal for repetitive liquid transfers.



Thermo Scientific ART Barrier Pipette Tips

Designed with customer requirements in mind. Choose ART barrier tips when working with samples that are difficult to handle or that can contaminate your pipette and workspace:

- Radioactive compounds
- Viscous substances
- Fragile cell lines
- Whole blood
- Viruses
- Difficult proteins
- PCR reagents

Use Reload Insert packaging to reduce the amount of plastic waste by four to five percent. These extended-length (3.5 in.) pipette tips are sterile and certified free from RNase, DNase, and pyrogen.



Tip Style	Volume	Cat. No.
MicroPoint	10 μ L	02-682-234
MicroPoint	10 μ L	02-682-233
MicroPoint	20 μ L	02-682-242
Low Retention	1000 μ L	02-682-244
Standard	1000 μ L	02-682-243

Vortex Mixing

Thermo Scientific LP Vortex Mixer

Choose continuous mix or pulse modes with this low-profile vortex mixer.

Plug Type	Cat. No.
U.S.	11-676-331
Cord set with multiple plug options	11-676-332



Fisher Bioreagents Chemicals and Solutions

Use these reagents and chemicals with confidence for your molecular biology procedures. Tested for contaminants that could interfere with your assays, they are available in a range of sizes for your convenience.

Description	Size	Cat. No.
Methanol, Sequencing	1L	BP11051
	4L	BP11054
Acetonitrile, DNA Synthesis	4L	BP11704
Dimethyl Sulfoxide (DMSO)	0.1	BP231100
	1L	BP2311
	4L	BP2314
Isopropanol, Molecular Biology	0.5	BP2618500
	1L	BP26181
	2.5L	BP2618212
Ethanol, Molecular Biology	4L	BP26184
	0.1	BP2818100
Ethanol, Molecular Biology	0.5	BP2818500
	4L	BP28184
70% Ethanol, Molecular Biology	500L	BP8201500
	1L	BP82011
	4L	BP82014
96% Ethanol, Molecular Biology	500mL	BP8202500
	1L	BP82021
	4L	BP82024

Centrifugation

Thermo Scientific mySPIN 6 Mini Centrifuge

The compact mySPIN 6 Mini Centrifuge offers maximum speed and flexibility in a minimized footprint. It is ideal for microfilter cell separations and HPLC samples. Plus, it includes two rotors to accommodate 0.2, 0.5, 1.5, 2mL microtubes and PCR strip tubes.

Description	Maximum Speed	Cat. No.
mySPIN 6 Mini Centrifuge	6,000rpm (2,000 x g)	75-004-061
mySPIN 12 Mini Centrifuge	12,500rpm (9,800 x g)	75-004-081



Thermo Scientific mySPIN 12 Mini Centrifuge

Bring increased efficiency and user comfort to your lab with the mySPIN 12 Mini Centrifuge. It is ideal for microfilter cell separation, HPLC protocols, and PCR, clinical, and diagnostic applications that require higher speeds.





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