

Find products to support your research and discovery for vaccine development, virology, and other critical therapies.



# Keep Your Science Moving Forward

More than ever, it's important for you to have access to the products you need. You can feel confident that the Fisher Scientific channel is here to support your work and that we are dedicated to keeping science moving forward.

thermo

applied biosystems

invitrogen



Visit fishersci.com/research-essentials or fishersci.ca/research-essentials to find more products and savings.

#### **Trademarks of Thermo Fisher Scientific:**

Acclaro, Applied Biosystems, Bac-to-Bac, BaculoDirect, Clonase, CloneWell, E-Gel, ExoSAP-IT, Expi293, Expi293F, ExpiFectamine, Fisherbrand, Gateway, GeneJET, Gibco, HiPure, HighPure, imMedia, Invitrogen, KingFisher, MagicMedia, MagMAX, MicroAmp, MiniAmp, mirVana, Molecular Probes, mySPIN, One Shot, OpenArray, pcDNA, Phasemaker, Platinum, PowerUp, ProFlex, PureLink, QuantStudio, Qubit, Quant-iT, RNaseOUT, RNAlater, RNaseZap, Select Agar, SimpliAmp, SizeSelect, SUPERase-In, SuperFi, SuperScript, SYBR, TOPO, TRIzol, VeriFlex, Veriti, Vivid Colors



#### **Supplier and Other Trademarks:**

Cytiva: Sera-Mag Select; Other: TaqMan

For trademark ownership, see **fishersci.com/trademarks**.

### Sample Preparation

### 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 1µL
- 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  $1-2~\mu\text{L}$  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 2.0µL
- 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
invitrogen Purelink Quick Plasmid Milliprep Ni	250 Preps	K210011
In its agap Dural into IID we Diagonid Filter Midiovan I/it	25 Preps	K210014
Invitrogen PureLink HiPure Plasmid Filter Midiprep Kit	50 Preps	K210015
Institution Dural intelligence Planning Filter Mayingan Kit	10 Preps	K210016
Invitrogen PureLink HiPure Plasmid Filter Maxiprep Kit	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
	10 Preps	12-183-020
Invitrogen PureLink RNA Mini Kits	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 RNAlater 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/ater Stabilization Solution	100mL	AM7020
Invitrogen RNA/ater-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	SimpliAmp	Veriti	MiniAmp Plus	MiniAmp	Automated
	PCR System	Thermal Cycler	Thermal Cycler <sup>1</sup>	Thermal Cycler	Thermal Cycler	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)	Triple 32-well <sup>2</sup> 96-well <sup>3</sup> Dual 96-well Dual flat block Dual 384-well	• 96-well <sup>4</sup>	<ul> <li>96-well<sup>3</sup></li> <li>Fast 96-well</li> <li>384-well</li> <li>60-well</li> </ul>	• 96-well <sup>4</sup>	• 96-well	• 96-well <sup>5</sup> • 384-well

<sup>&</sup>lt;sup>1</sup> Also available as an FDA Class 1/CE-IVD labeled device.

 $<sup>^{\</sup>rm 5}$  Compatible with semi- or full-skirted plates.



= cloud-enabled instrument

<sup>&</sup>lt;sup>2</sup> 2-zone VeriFlex Block

<sup>&</sup>lt;sup>3</sup> 6-zone VeriFlex Block

<sup>&</sup>lt;sup>4</sup> 3-zone VeriFlex Block

### Find Your PCR Plastic Fit

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



96-Well

96-Well Fast

Genetic analyzers

your application.		O X OZ WON	ProFlex, SimpliAmp, Veriti, MiniAmp Plus,	2720	9700	00 110111 401	ProFlex,	9700	0	3130, 3130xl, 3500, 3500xl,
Product	Cat. No.	ProFlex	MiniAmp	27	97	Veriti	Veriti	97	34	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	44.000.05.44.000.70									
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					•				
rast fleaction rubes with Cap, c. fine										
Reaction Tubes with Cap, 0.2mL*	N8010540, N8010612, N8011540	•	•	•	•					
Reaction Tubes without Cap, 0.2mL*	N8010533, N8011533	•	•	•	•					
Optical Tubes without Cap, 0.2mL Seals and Covers	N8010933	•	•	•	•					
Clear Adhesive Film	43-063-11		•	•	•	•	•	•		
Optical Adhesive Film	43-609-54, 43-119-71		•	+	•	•	•	•		
Full 96-Well Plate Covers	N8010550			•	•			H		
Clear 32-Well Plate Adhesive Film	A32812	•**	•	•	•					
Accessories	/ 102012	_								
Splash-Free 96-Well Base	43-120-63			•	•					
96-Well Support Base	43-795-90					•		$\vdash$		•
96-Well Base			H			-				•
96-Well Reaction Tube/Tray/Retainer Set, 0.2mL	N8010531 40-308-3, 40-308-6			•	•					
* Multiple colors are available			<u> </u>				1			

 $<sup>^{\</sup>star}$  Multiple colors are available.

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.

<sup>\*\*</sup> Do not use MicroAmp 3 x 32-Well Retainer.

### 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





Description	Quantity	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	Quantity	Cat. No.
Taq DNA Polymerase, Recombinant	500 Units	10-342-020
Taq 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	Quantity	Cat. No.
Platinum II Taq 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

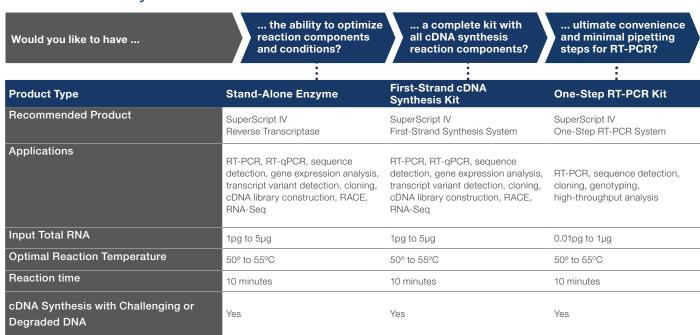
#### Reverse Transcription

#### 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.



Description	Size	Cat. No.
	2,000 Units	18-090-010
SuperScript IV Reverse Transcriptase	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
Supersulpt to One-Step ht Fon Systems with ezbhase Enzyme	500 Reactions	12-595-100

#### **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 Cytiva 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 Cytiva 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
7001111	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.
	100	200µL	75-001-200UL
	480	8-Tube Strip	75-001-1EA
Clean-Up Reagent	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.

Visit fishersci.com/quantstudio or fishersci.ca/quantstudio to learn more.



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

#### 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.

### 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.



### 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.
	100g	BP170100
Acrylamide	500g	BP170500
	5kg	BP1705
Agercae Malecular Dialogu	100g	BP160100
Agarose, Molecular Biology	500g	BP160500
Agazaga Capatia Apakaia	100g	BP1356100
Agarose, Genetic Analysis	500g	BP1356500
	500g	BP381500
Glycine	1kg	BP3811
	5kg	BP3815
	500g	BP152500
Tris Base	1kg	BP1521
	5kg	BP1525
	10kg	BP15210
	25kg	BP15225

### Transfection

### Gibco Expi293 Met (-) Protein Labeling Kit

Kit components are specifically formulated without methionine, allowing users to add a labeled methionine of their choice.

- Methionine-free medium and transfection enhancer formulations
- Two- to ten-fold higher protein yields compared to other transfection reagents used for high-density 293 cell culture
- Same transient transfection protocol as ExpiFectamine 293 Transfection Kit
- Scalable transfection from small- to large-scale while maintaining equivalent volumetric protein yields
- Specifically designed to easily integrate with other components of the Expi293 Expression System, including Expi293F cells and Expi293 Expression Medium



Cat. No.: A41249

Visit fishersci.com/transfection or fishersci.ca/transfection to view more transfection products.

### **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

### 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)	100mL	BP231100
	1L	BP2311
	4L	BP2314

#### 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.

Cat. No.: 75-004-061



### 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.

Cat. No.: 75-004-081



### Thermo Scientific Digital Vortex Mixers

Mix samples accurately and efficiently at your desired speed from 0 to 3000rpm. Features continuous and touch modes with precise speed control and quick set-up. Digital display shows speed and time.

Cat. No.: 11-676-684



#### Plate Sealer and Film

### Thermo Scientific ALPS5000 Automated Plate Heat Sealer

The next generation in plate sealing equipment, the ALPS5000 offers fast sealing times, increased process customization, and all-electric operation for reduced noise and improved reliability.

Cat. No.: AB5000



### Thermo Scientific Clear Seal Diamond Heat Sealing Film

Ideal for fluorescence and colorimetric applications, use this clear polymer heat seal for PCR in screw-down or clip-down heated lid thermal cyclers and for qPCR when optical clarity matters. Seal integrity range is -80°C to +120°C.

Dimensions	Cat. No.
78mm x 370m	AB-3799
85mm x 135mm	AB-0812



