

o o o o o o o o o o **Inspiring** Innovation o o o o o o o o o o

# Molecular and Cellular Analysis

## Workflow Solutions

 **fisher scientific**  
part of Thermo Fisher Scientific

# Make the Most of Your Research

Find the high-quality products you need to support every stage of your molecular and cellular analysis research through the Fisher Scientific channel. Our comprehensive assortment will help you make the most of your research from start to finish. Choose from a wide selection of workflow essentials from the most trusted brands in the industry.

**applied biosystems**

**thermo scientific**

**••BioTek**  
A part of **Agilent**

**cytiva**

**Trademarks of Thermo Fisher Scientific:**

Applied Biosystems, ChargeSwitch, DNazol, ezDNase, Fisherbrand, Fisher Bioreagents, GENESYS, Halt, Invitrogen, IV VILO, NanoDrop, Pierce, Platinum, PowerTrack, PureLink, SuperScript, SurePrep, SYBR, TaqMan, Thermo Scientific, Tween

**Supplier and Other Trademarks:**

BioSpa, BioTek, Corning, Cytation, Cytiva, FastDNA, MP Biomedicals, MPure, MultiFlo, Sera-Mag, SeraSil-Mag, Sera-Xtracta



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applied biosystems

# Real-Time PCR Solutions

## Applied Biosystems TaqMan Pre-Designed Assays

Accelerate the discovery of the genetic basis of disease while generating reliable, high-quality data with Applied Biosystems TaqMan Pre-Designed Assays and Arrays. Choose from over 20 million pre-designed assays across more than 30 species in a format of your choice, all backed by the TaqMan guarantee.

### Find Your Assay

Applied Biosystems TaqMan Assays come in three cost-effective and easy-to-use formats that support a range of research designs. Discover and verify relevant biomarkers, disease pathways, and immunological responses with high specificity and sensitivity across these key research areas:

- Virology
- Cancer
- Immuno-oncology
- Complex and neurological disease
- Immunology

Visit [fishersci.com/TaqManAssays](http://fishersci.com/TaqManAssays) or [fishersci.ca/TaqManAssays](http://fishersci.ca/TaqManAssays) to learn more.



# Applied Biosystems TaqMan Array qPCR Plates

Maintain convenience and speed with Applied Biosystems TaqMan Array qPCR Plates. The plates are designed with panels of pre-spotted primer and probe sets relevant to specific pathways, biomarker sets, or disease states.

Visit [fishersci.com](https://fishersci.com) or [fishersci.ca](https://fishersci.ca) to learn more.

## Get a Sample

### Get a Sample of TaqMan Fast Advanced Master Mix When You Buy an Array Plate

When you purchase a qualifying Applied Biosystems TaqMan Real-Time PCR Array Plate, you'll get a 1 mL sample of TaqMan Fast Advanced Master Mix at no additional cost.

Visit [fishersci.com/trytaqman](https://fishersci.com/trytaqman) or [fishersci.ca/trytaqman](https://fishersci.ca/trytaqman) to learn more.

*Excludes healthcare customers.*

# Applied Biosystems PowerTrack SYBR Green Master Mix

Generate better qPCR results with Applied Biosystems PowerTrack SYBR Green Master Mix. Specially designed to work with Applied Biosystems SuperScript IV VILO Reverse Transcriptase, this mix delivers unsurpassed specificity and sensitivity and includes a two-color tracking dye system.

**Key Applications:** Research labs, biotechnology firms, and contract research organizations performing gene expression, cell line screening, and chromatin immunoprecipitation

Description	Quantity	Cat. No.
Applied Biosystems PowerTrack SYBR Green Master Mix	1 mL	A46012
	5 mL	A46109
	2 x 5 mL	A46110
	5 x 5 mL	A46111
	10 x 5 mL	A46112
	50 mL	A46113



Visit [fishersci.com/qpcrreagents](https://fishersci.com/qpcrreagents) or [fishersci.ca/qpcrreagents](https://fishersci.ca/qpcrreagents) to learn more.

## Buy 1 Get 1

### Get 1 PowerTrack Master Mix When You Buy 1 SuperScript

When you purchase one Invitrogen Superscript IV VILO Master Mix, you'll get one Applied Biosystems PowerTrack SYBR Green Master Mix at no additional cost.

Visit [fishersci.com/everbetter](https://fishersci.com/everbetter) or [fishersci.ca/everbetter](https://fishersci.ca/everbetter) to learn more.

*Excludes healthcare customers.*

## Save 33%

### Save 33% on PowerTrack SYBR Green Master Mix

Get 33% off your purchase of three Applied Biosystems PowerTrack SYBR Green Master Mixes when you enter promo code **SYBR4LESS** at checkout.

Visit [fishersci.com/SYBR4LESS](https://fishersci.com/SYBR4LESS) or [fishersci.ca/SYBR4LESS](https://fishersci.ca/SYBR4LESS) to learn more.

*Restrictions apply.*



# Kits for High-Yield DNA Extraction and Purification

## Cytiva Sera-Xtracta Cell-Free DNA Kit

Extract and purify high yields of cell-free DNA (cfDNA) from blood plasma with the Cytiva Sera-Xtracta Cell-Free DNA Kit. Select for small fragments while minimizing genomic contamination. Chaotropic agents and detergents disrupt protein components to which the cfDNA may initially bind and promotes the selective cfDNA binding to the silica-coated magnetic beads.

**Key Applications:** Cancer diagnoses and monitoring where samples are precious



### Features

- Efficient recovery of small-fragment cfDNA (50 to 300 bp)
- Increased sensitivity levels (captures more cfDNA)
- One kit covers input of 0.5 mL to 4 mL
- Procedure takes less than 120 minutes
- Compatible with next-generation sequencing (NGS), qPCR, ddPCR, BEAMing, and other amplification and genotyping applications

Description	Cat. No.
Cytiva Sera-Xtracta Cell-Free DNA Kit	09-920-066

# Cytiva

## Sera-Xtracta Genomic DNA Kit

Extract genomic DNA from whole blood using a simplified protocol with the Cytiva Sera-Xtracta Genomic DNA Kit. This kit offers magnetic bead-based extraction and purification, minimizing the co-purification of RNA, and often eliminating the need for further RNase treatment.

Yield genomic DNA with the purity and quality required by today's molecular biology techniques. Chaotropic agents and detergents disrupt protein components to which the genomic DNA may initially bind and promotes the selective binding of genomic DNA to the silica-coated magnetic beads.

The kit uses Proteinase K to digest sample protein, an active agent in the presence of EDTA, detergents, and other enzyme inhibitors. Denatured contaminants can be easily removed by washing the silica beads with an ethanolic buffer set. The purified genomic DNA, eluted in a low ionic strength buffer, is suitable for most downstream molecular biology applications.



### Features

- High recovery rates (4 to 8  $\mu\text{g}$  from 200  $\mu\text{L}$  of whole blood)
- Purity ratio (A260/A280) greater than 1.7
- Simplified protocol (minimizes need for most further RNase treatment)
- Compatible with next-generation sequencing (NGS), cloning, restriction enzyme digestion, PCR amplification, and genotyping applications

Description	Cat. No.
Cytiva Sera-Xtracta Genomic DNA Kit	09-920-067

# Extraction

Help ensure the success and validity of future analyses.



**Cytiva**  
**SeraSil-Mag Silica-Coated  
Superparamagnetic Beads**

Isolate nucleic acids and deliver high-purity DNA extraction.

Cat Nos.: 09-928-102, 09-928-103, 09-928-104, 09-928-105



**Invitrogen**  
**DNAzol, ChargeSwitch,  
and PureLink Plant Kits**

Isolate high-quality genomic DNA from plant samples with the right level of efficiency.

Cat. Nos.: 10-978-021, CS18000, CS1800010, K183001



**MP Biomedicals**  
**FastDNA Soil, Fungal,  
Bacterial, and Fecal Kits**

Quickly isolate PCR-ready genomic DNA from soil, fungi, or bacterial samples.

Cat. Nos.: MP119696200, MP119696300, MP119696500, MP119696400, 11-702-2600



**MP Biomedicals**  
**MPure and FastDNA  
Plant Kits**

For extraction or isolation of DNA from plant and fungal tissue samples.

Cat. Nos.: 11-702-2150, MP119696600



## Fisher Bioreagents SurePrep Kits

For rapid isolation and purification of RNA,  
DNA, and proteins.

Cat Nos.: BP280250, BP280550, BP281550, BP280950,  
BP280050, BP280350



## MP Biomedicals Tubes

For use with nucleic acid isolation and  
purification protocols.

Cat. Nos.: MP116910050, MP116910100,  
MP116910500



## Thermo Scientific Halt Extraction Inhibitors

Inhibit proteolytic degradation during cell lysis  
and protein extraction.

Cat. Nos.: PI78425, PI78429, PI78430, PI78437, PI78438,  
PI78439, PI87785, PI87786



## Thermo Scientific Pierce Extraction Inhibitors

Convenient and ready to use during cell lysis  
and protein extraction.

Cat. Nos.: PIA32965, PIA32955



## Fisher Bioreagents Water

Tested for DNase and RNase, guaranteed nuclease-free, and suitable for all RNA work.

Cat. Nos.: BP561-1, BP248450, BP2484100, BP24701

# Quantification

Verify sample quality to help avoid downstream delays.



**Thermo Scientific**  
**NanoDrop One Microvolume  
UV-Vis Spectrophotometer**

Quantify and qualify samples and maximize your productivity.

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Cat. No.: 13400518



**Thermo Scientific**  
**NanoDrop 2000/2000c  
Spectrophotometer**

Patented sample retention technology measures sample volumes as small as 0.5  $\mu$ L.

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Cat. Nos.: ND2000, ND2000C, 13-400-412, 13-400-411



**Thermo Scientific**  
**NanoDrop Dymo  
LabelWriter 450 Printer  
with Labels**

Print sample data onto self-adhesive labels included with printer purchase.

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Cat. No.: 13400520



**Thermo Scientific**  
**GENESYS 140/150 Vis/UV-  
Vis Spectrophotometers**

Designed for repetitive measurements and ease of use in routine industrial or university labs.

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Cat. Nos.: 14-385-353, 14-385-352

# Amplification

Enable efficient and reproducible results throughout your experiment.



## Invitrogen SuperScript Master Mixes

For fast, sensitive, and reproducible cDNA synthesis in RT-qPCR applications.

Cat. Nos.: 11766500, 11766500



## Invitrogen Platinum SuperFi DNA Polymerase

Combine superior fidelity with an innovative buffer for universal primer annealing.

Cat. Nos.: 12-369-010, 12-369-050, 12-369-250

# Purification

Tailor each reagent to your workflow and purification needs.



## Cytiva Sera-Mag Select

Deliver selective binding of DNA fragments for next-generation sequencing and PCR cleanup.

Cat. Nos.: 09-928-106, 09-928-107, 09-928-108



# Reliable Solutions for Cellular Analysis

## BioTek MultiFlo FX Multi-Mode Dispenser and Media Exchange Module

Save space, time, and instrumentation budgets with the BioTek MultiFlo FX Dispenser, an automated, multi-mode reagent dispenser for 6- to 1536-well microplates. It incorporates several unique technologies, including parallel dispense, random access dispense, and the new patent-pending automated gentle media exchange modules to facilitate a variety of liquid handling applications. This system can replace up to five liquid handlers.

The BioTek MultiFlo FX Automated Media Exchange Module serves as a compliment to the dispenser and helps protect and encourage proliferation in your assays. Using peristaltic pumps to dispense and aspirate media, this module operates slowly to avoid disturbing your cells.

**Key Applications:** 2D and 3D cell culture, concentration normalization assays, ELISA, and bead-based assays



Description		Cat. No.
BioTek MultiFlo FX Microplate Dispenser	Two Module Arms, One Peristaltic Dispense Pump, One Peristaltic Pump Cassette	BTMFXP2
BioTek MultiFlo FX Automated Media Exchange Module	Second Peristaltic Pump, AMX Dispense/Aspirate Manifolds	BT1260041

### Special Offer

#### Get an AMX Module with Dispenser Purchase

When you purchase a BioTek MultiFlo FX Multi-Mode Dispenser, you'll get an AMX Automated Media Exchange Module upgrade at no additional cost.

Visit [fishersci.com/BioTek-MultiFlo](http://fishersci.com/BioTek-MultiFlo) or [fishersci.ca/BioTek-MultiFlo](http://fishersci.ca/BioTek-MultiFlo) to learn more.

*Excludes healthcare customers.*

## BioTek BioSpa 8 Automated Incubator

Continuously record environmental conditions with customized notifications for detailed assay monitoring and analysis. The BioTek BioSpa 8 Automated Incubator allows you to run up to eight plates at once, monitor real-time temperature and humidity, and control and monitor CO<sub>2</sub>/O<sub>2</sub>.

You can also create your own live cell analysis system by combining the BioTek BioSpa 8 Automated Incubator with a BioTek Cytation Cell Imaging Multi-Mode Reader and a BioTek MultiFlo FX Multi-Mode Dispenser for full workflow automation.

**Key Applications:** T cell activation, T cell-mediated cytotoxicity, spheroid proliferation, cell proliferation, apoptosis, cytotoxicity, tumor invasion, stem cell differentiation, cell migration and invasion, cell cycle, translocation, NETosis, angiogenesis, oxidative stress, cell viability, barrier assays



Description		Cat. No.
BioTek BioSpa 8 Automated Incubator	Incubation to 45°C with Control and Monitoring	11-120-550
	Incubation to 45°C and CO <sub>2</sub> /O <sub>2</sub> Control and Monitoring, Plus Water Pan and Humidity Monitoring	11-120-551

## BioTek Cytation Cell Imaging Multi-Mode Readers

Combine automated digital microscopy and conventional microplate detection with a BioTek Cytation Cell Imaging Multi-Mode Reader. Choose a BioTek Cytation 1, 5, or 7 to align with the needs of your lab.

The **BioTek Cytation 7** combines automated digital upright and inverted wide-field microscopy with conventional multi-mode microplate reading in a unique, patented design. The inverted microscopy module provides sample visualization from 1.25x to 60x magnification in fluorescence, brightfield, and color brightfield imaging. The upright microscopy module with reflected light imaging enables ELISpot or fast slide scanning and ROI detection workflows.

The **BioTek Cytation 5** combines automated digital microscopy and multi-mode microplate detection in a configurable, upgradeable platform. The microscopy module offers up to 60x magnification in fluorescence, brightfield, high-contrast brightfield, color brightfield, and phase contrast imaging. The multi-mode detection module includes filter- and monochromator-based fluorescence detection, luminescence, and UV-Vis absorbance detection.

The **BioTek Cytation 1** combines fluorescence and high-contrast brightfield imaging with multi-mode detection without the expense and complexity commonly associated with other digital microscopy systems. This provides both quantitative phenotypic cellular information with well-based quantitative data. Temperature control and shaking are standard; CO<sub>2</sub>/O<sub>2</sub> control and reagent injectors are available.

# BioTek Cytation Cell Imaging Multi-Mode Readers



Description		Cat. No.
BioTek Cytation 7 Cell Imaging Multi-Mode Reader with Upright Microscope	Upright Microscope with Finder Scope; 2x, 4x, and 8x Lenses; Incubation to 45°C; Linear, Orbital, and Double-Orbital Shaking	BTCYT7U
	Upright Microscope with Finder Scope; 2x, 4x, and 8x Lenses; Inverted Fluorescence Microscope with Wide Field of View Camera and Up to 60x Magnification; Fluorescence, Brightfield, and Color Brightfield Imaging; Monochromator-Based Fluorescence Intensity; Luminescence and UV-Vis Microplate Detection; Incubation to 45°C; Linear, Orbital, and Double-Orbital Shaking	BTCYT7UMW
BioTek Cytation 5 Cell Imaging Multi-Mode Reader	Inverted Fluorescence Microscope with Wide Field of View Camera and Up to 60x Magnification; Fluorescence, Brightfield, and Color Brightfield Imaging; Monochromator Fluorescence Intensity, Time-Resolved Fluorescence (Secondary Mode), Luminescence, and UV-Vis Microplate Detection; Incubation to 65°C; Linear, Orbital, and Double-Orbital Shaking	BTCYT5MV
	Inverted Fluorescence Microscope with Wide Field of View Camera and Up to 60x Magnification; Fluorescence, Brightfield, Phase Contrast, and Color Brightfield Imaging; Fluorescence Intensity, Time-Resolved Fluorescence (Secondary Mode), Luminescence, and UV-Vis Microplate Detection; Incubation to 65°C; Linear, Orbital, and Double-Orbital Shaking	BTCYT5MPW
BioTek Cytation 1 Cell Imaging Multi-Mode Reader	Inverted Fluorescence Microscope with Up to 60x Magnification; Incubation to 45°C; Linear, Orbital, and Double-Orbital Shaking	BTCYT1V
	Inverted Fluorescence Microscope with Up to 60x Magnification; Fluorescence and High-Contrast Brightfield Imaging, Filter/Dichroic Fluorescence Intensity, Time-Resolved Fluorescence, Fluorescence Polarization, Luminescence, and Monochromator UV-Vis Microplate Detection; Incubation to 45°C; Linear, Orbital, and Double-Orbital Shaking	BTCYT1FAV

## Get an Upgrade

### Get Environmental Control Upgrade with Cell Analysis System Purchase

When you buy a qualifying BioTek Cytation Multi-Mode Reader with a BioTek BioSpa 8 Automated Incubator, you'll get an environmental control upgrade, over \$7,500 in savings, at no additional cost.

Visit [fishersci.com/BioTek-BioSpa-Offer](http://fishersci.com/BioTek-BioSpa-Offer) or [fishersci.ca/BioTek-BioSpa-Offer](http://fishersci.ca/BioTek-BioSpa-Offer) to learn more.

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# Antibodies

## Advanced Search Tool

The Fisher Scientific channel offers more than 300,000 validated antibodies from market-leading brands.

### Find the Right Antibodies from Thousands of Options

Use the Antibodies Advanced Search Tool to search our full collection of primary and secondary antibodies, isotype controls, proteins, and peptides from trusted brands. Just enter your requirements, click search, and you're done.

**Primary Antibodies**

**Secondary Antibodies**

**Isotype Controls**

**Proteins and Peptides**

Target, gene symbol, antigen	Application ▾	Target Species ▾	Search
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Visit [fishersci.com/antibodies](https://fishersci.com/antibodies) or [fishersci.ca/antibodies](https://fishersci.ca/antibodies) to learn more.

## Blocking Components

Support cell growth across a wide range of cell types.



### Fisherbrand Fetal Bovine Serum

Compliant with cGMPs, sourced from Canada, and triple 0.1  $\mu\text{m}$  filtered.

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Cat. No.: FB12999102



### Cytiva Fetal Bovine Serum

Used as a serum supplement for the *in vitro* cell culture of eukaryotic cells.

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Cat. Nos.: SH3007102, SH3007103, SH300710340, SH300710345, SH3007103HI

## Washing Components

Effectively remove residual medium with the proper solution.



### Cytiva Phosphate Buffered Saline

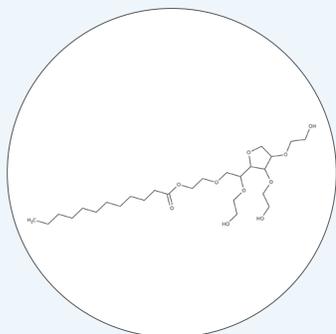
Undergoes sterility testing and is used for a variety of cell culture applications.

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Cat. Nos.: SH3025601, SH3025602, SH30256FS, SH30256LS, SH3025801, SH3025802

# Buffer Add-In Components

Find the right addition for your application.

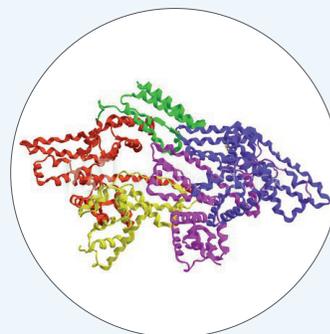


## Fisher Bioreagents Tween 20

Nonionic detergent used in the isolation of water-soluble membrane proteins.

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Cat. Nos.: BP337-100, BP337-500



## Fisher Bioreagents Bovine Serum Albumin

Purified and prepared by a proprietary heat shock process.

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Cat. Nos.: BP9706100, BP9703100, BP9705100

# Plastics

Find the right format for your workflow and cell type.

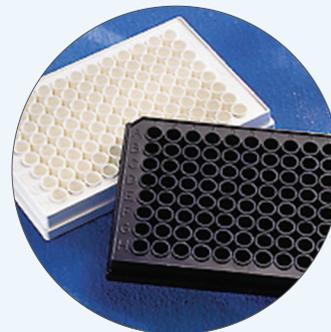


## Fisherbrand Disposable Pipette Basins

Conveniently packaged in easy-to-open bags to reduce contamination risks.

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Cat. Nos.: 13-681-508, 13-681-509,  
13-681-501, 13-681-500, 13-681-502, 13-681-503

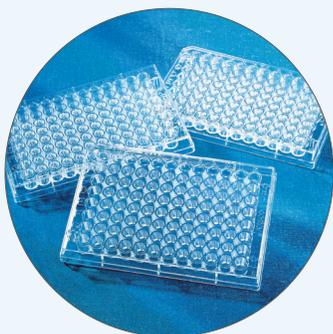


## Corning Black/White Microplates

Lot tested for opacity and background and used for florescent and luminescent assays.

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Cat. Nos.: 07-200-589, 07-200-590,  
07-200-591, 07-200-592

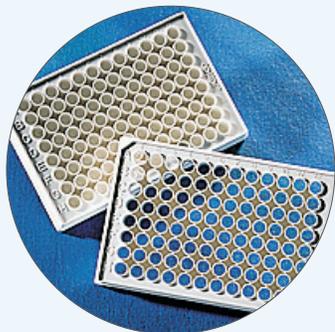


## Corning Clear Microplates

Manufactured from clear medical grade polystyrene for strength and visibility.

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Cat. Nos.: 07-200-36, 07-200-39

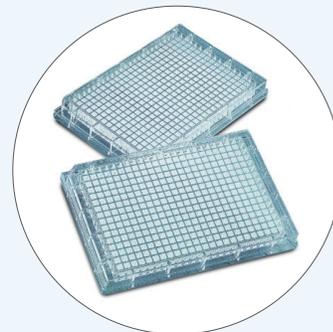


**Corning**  
**NBS Microplates**

Treated to create a nonionic, hydrophilic surface to minimize molecular interactions.

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Cat. Nos.: 07-200-731, 07-200-777,  
07-200-778, 07-200-791



**Corning**  
**384-Well Clear Microplates**

An excellent solution for cell culture and colorimetric assays.

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Cat. Nos.: 07-200-643, 07-200-645,  
07-201-157



**Corning**  
**384-Well Black/White Microplates**

Available untreated, with a high-binding surface, or tissue culture treated.

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Cat. Nos.: 07-201-322, 09-761-21, 09-761-85, 09-761-86,  
15-100-155, 15-100-156, 15-100-157, 15-100-158, 15-100-159

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