



life sciences solutions

Thermo
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gibco

Tools to accelerate your life science research

Thermo Scientific™, Applied Biosystems™, Invitrogen™ and Gibco™ reagents, consumables and instruments

ThermoFisher
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Cell Biology > Cell Culture and Transfection

Cell Culture

From the basic formulations to the newest innovations, Gibco™ products provide the highest quality, consistency, and performance for your cell culture and tissue culture needs including cell culture media, reagents, cell lines, cell cultures, fetal bovine serum, and growth factors.

Learn more at: thermofisher.com/cellculture

Advanced Media - requires less sera

Gibco™ Advanced™ Media are enhanced basal media which can help grow cells with less serum:

- Common formulations available accommodate common cell lines
- Fewer lot-to-lot differences in fetal bovine serum (FBS) mean less variability
- Using less serum and testing fewer lots results in reduced cost
- Equivalent cell growth/no change in morphology of common cell lines



GlutaMAX media - keeps your cells healthier longer

Gibco™ GlutaMAX™ media is more stable than L-glutamine, keeping your cells healthier for longer:

- Superior stability helps ensure that it does not degrade during storage or incubation, which happens with L-glutamine
- GlutaMAX Supplement is available as a stand-alone supplement or as a component in Gibco™ basal media products

TrypLE Express- the superior replacement for Trypsin

Gibco™ TrypLE™ Express delivers cell detachment that is gentler on cell surface proteins:

- Used to detach cells from a growth surface (plastic)
- Store at room temperature—no need to freeze/thaw (Trypsin requires this)
- Animal-origin free (AOF)—beneficial for some applications



Transfection

Expertise in cellular and molecular biology is behind the Invitrogen™ product portfolio of DNA reagents and consumables, which are the most cited and trusted transfection and selection systems available. We have a range of innovative new products available including: Invitrogen™ Lipofectamine™ 3000 Reagent, Invitrogen™ Lipofectamine™ MessengerMAX Reagent and more.

Learn more at: thermofisher.com/transfection

Lipofectamine 3000 Transfection Reagent

Invitrogen™ Lipofectamine™ 3000 transfection reagent is the versatile reagent with the power to transfect your most difficult cells:

- Superior efficiency—into the broadest spectrum of difficult-to-transfect cells
- Gentle with low toxicity—for improved cell viability
- Versatile—single kit for DNA, RNA, and cotransfection



Learn more at: thermofisher.com/lipofectamine3000

Ordering information

Description	Size	Cat. no.
Advanced DMEM/F-12 Advanced DMEM/F-12	10 x 500 mL	11550446
DMEM, high glucose, GlutaMAX Supplement, pyruvate	10 x 500 mL	12077549
TrypLE Express Enzyme (1X), no phenol red	100 mL	10718463
Lipofectamine 3000 Transfection Reagent	0.1 mL	15282465
Lipofectamine RNAiMAX Transfection Reagent	0.1 mL	12333563
Lipofectamine MessengerMAX Transfection Reagent	0.3 mL	15397974
ExpiFectamine 293 Transfection Kit	1 x 1 L culture	13385544
Lipofectamine 2000 Transfection Reagent	0.3 mL	12313563
InvivoFectamine 3.0 Reagent	10 reactions	15331018

More pack sizes are available

To learn more and to order, please contact your local Fisher Scientific sales representative, customer service team, or visit the Fisher Scientific website.

Cell Biology > Stem Cells and Neurobiology

Manufactured with superior quality standards, our extensive range of Gibco™ media, supplements, and reagents can meet all of your stem cell culture needs.

Learn more at: thermofisher.com/stemcells

Stem Cell Engineering & Reprogramming

CytoTune -iPS 2.0 Sendai Reprogramming Kit

The Gibco™ CytoTune™-iPS 2.0 Sendai Reprogramming Kit is non-integrating and still requires only one overnight incubation compared to multiple days of transductions required for mRNA reprogramming.

- Increased reprogramming efficiency for even more colonies
- Lower cytotoxicity to allow for smaller starting cell populations
- Faster clearance to get to your iPSC experiments sooner

Pluripotent Stem Cell Culture

Essential 8 Media System

Choose between Gibco™ Essential 8™ Medium for PSC maintenance and expansion and Gibco™ Essential 8™ Flex Medium for a flexible feeding schedule. Essential 8 Medium is our most defined and consistent feeder-free medium for induced pluripotent stem cell culture. It has been optimised for a wide variety of applications to help researchers achieve ultimate control over their PSC culture systems.



Ordering information

Description	Size	Cat. no.
Essential 8 Medium	500 mL	15190617
Essential 8 Flex Medium Kit	1 kit	15374799
B-27 Supplement (50X), serum free	10 mL	11530536
Neurobasal Medium	500 mL	11570556
N-2 Supplement (100X)	5 mL	11520536
PSC Neural Induction Medium	500 mL	15300641
CytoTune-iPS 2.0 Sendai Reprogramming Kit	1 pack	15286620

More pack sizes are available

B-27 Supplements

Gibco™ B-27™ Supplement is the most cited neuronal cell culture supplement. It is optimised and serum-free and is used to support the low or high density growth and short or long-term viability of hippocampal and other CNS neurons.



Neurobasal Medium

Gibco™ Neurobasal™ Medium is a basal medium that meets the special cell culture requirements of pre-natal and embryonic neuronal cells when used with B-27 Supplement.

N2 Supplement

Gibco™ N-2 Supplement is a chemically defined, serum-free supplement based on Bottenstein's N-1 formulation. N-2 Supplement is intended for use with Neurobasal media.



Stem Cell Differentiation

PSC Neural Induction Medium

Gibco™ PSC Neural Induction Medium is a serum-free medium that provides high efficiency neural induction of human pluripotent stem cells in only 7 days. Unlike existing methodologies, use of PSC Neural Induction Medium does not require the intermediary step of embryoid body (EB) formation, which adds time, labour, and variability.

To learn more and to order, please contact your local Fisher Scientific sales representative, customer service team, or visit the Fisher Scientific website.

Cell Biology > Cell Analysis

We offer a broad range of cell analysis research solutions including Invitrogen™ labelling and detection technologies, antibodies and immunoassays, Invitrogen™ EVOS™ cell imaging systems, Invitrogen™ Countess™ II FL Automated Cell Counter, and the Invitrogen™ Attune™ Flow Cytometer.

Countess II Automated Cell Counters

We offer two high performance automated cell counters designed to meet the needs of any lab. The Invitrogen™ Countess™ II and Countess II FL Automated Cell Counters contain advanced autofocusing and counting algorithms to allow you to quickly and accurately identify and count cells within a population while avoiding user variation associated with manual focusing mechanisms. The Countess II FL Automated Cell Counter offers bright-field and two optional, user-interchangeable fluorescent channels. The fluorescent colours collected are determined by the insertion of individual light cubes.



Learn more at: thermofisher.com/countess

EVOS Cell Imaging Systems

An EVOS cell imaging system is a must-have in your lab for cell imaging – whether you're capturing images for publication, teaching, or research. Designed to allow you to focus on your data rather than the operation of a microscope, they also help you to perform a variety of routine and speciality applications ranging from cell culture to complex protein analysis and multi-channel fluorescence imaging.



Learn more at: thermofisher.com/evos

LED Light Cubes

Invitrogen™ EVOS™ Light Cubes integrate LEDs and high-performance filters in a novel illumination system that delivers precise control, minimal maintenance, and exceptional reliability:



- Shorter light paths for more efficient fluorescent detection
- Longer bulb lifetime (>50,000 hours) for lower maintenance costs
- Adjustable light intensity to minimise photobleaching
- Continuous light intensity for more consistent results

These LED cubes are compatible with the Invitrogen™ EVOS™ FL and FL Auto systems as well as the Countess II FL Automated Cell Counter.

For the full range of light cubes visit: thermofisher.com/evos

Ordering information

Description	Size	Cat. no.
Countess II FL Automated Cell Counter	1 unit	15307812
Countess II Automated Cell Counter	1 unit	15397802
Countess Cell Counting Chamber Slides	50 slides	10399053
Countess II FL Reusable Slide	1 unit	15311986
Countess II FL Reusable Slide Holder*	1 unit	15335656
EVOS XL Core Imaging System	1 unit	15339661
EVOS XL Imaging System	1 unit	11550207
EVOS FLoid Cell Imaging Station	1 unit	12323593
EVOS FL Imaging System	1 unit	11547215
EVOS FL Colour Imaging System	1 unit	15319601
EVOS FL Auto Imaging System	1 unit	15120767
EVOS Onstage Incubator	1 unit	15100777

*Only compatible with the Countess II FL instrument.

To learn more and to order, please contact your local Fisher Scientific sales representative, customer service team, or visit the Fisher Scientific website.

Cell Biology > Flow Cytometry

Attune NxT Flow Cytometer

The Invitrogen™ Attune™ NxT Flow Cytometer is a benchtop analyser that uses a revolutionary technology— acoustic focusing— to align cells or particles prior to the laser interrogation points. Now with the flexibility to create a customised 4-laser, 14-colour system, the Attune NxT flow cytometer is designed to accommodate a variety of experimental protocols and any lab budget.



- Modular design - multiple configurations available and field upgradable
- Save time - 10X faster speeds with no loss in data quality
- Simplified sample prep - no wash, no lyse options, non-clogging fluidics
- Enables unique applications - complex protocols on a broad range of cell types and samples

Learn more at: thermofisher.com/attune

Flow Cytometry Reagents

An extensive array of Invitrogen™ stains and kits have been developed to assess cell function, health, and viability.

Our top products are listed below, but you can find many more at thermofisher.com/flow-cellhealth



Flow Cytometry Resources

Get the most out of your research with flow cytometry tutorials, protocols and scientific posters presented at key scientific meetings by Invitrogen™ R&D scientists. Also, watch our on-demand webinars to learn tips and tricks to help optimise your experimental results.

Start learning at: thermofisher.com/flowresources

Ordering information

Section	Description	Laser type	Size	Cat. no.
Cell viability	LIVE/DEAD Fixable Aqua Dead Cell Stain Kit	Violet	200 assays	10321873
Cell viability	SYTOX Green Dead Cell Stain	Blue	1 mL	11310972
Cell viability	SYTOX Red Dead Cell Stain	Red	1 mL	10301833
Cell proliferation	Click-iT Plus EdU Alexa Fluor 488 Flow Cytometry Assay Kit	Blue	50 assays	15267156
Cell proliferation	Click-iT Plus EdU Alexa Fluor 488 Flow Cytometry Assay Kit	Blue	100 assays	15332202
Cell proliferation	Click-iT Plus EdU Alexa Fluor 647 Flow Cytometry Assay Kit	Red	50 assays	15234657
Cell proliferation	Click-iT Plus EdU Alexa Fluor 647 Flow Cytometry Assay Kit	Red	100 assays	15316900
Cell proliferation	CellTrace Violet Cell Proliferation Kit	Violet	180 assays	10220455
Cell proliferation	CellTrace CFSE Cell Proliferation Kit	Blue	1 kit	10013162
Cell proliferation	CellTrace Far Red Cell Proliferation Kit	Red	1 kit	15396613
Apoptosis	CellEvent Caspase-3/7 Green Flow Cytometry Assay Kit	Blue/green	100 assays	13413329
Apoptosis	Annexin V, Alexa Fluor 488 conjugate	Blue	500 µL	10633853
Oxidative stress	CellROX Green Flow Cytometry Assay Kit	Blue	100 assays	15258236
Oxidative stress	CellROX Orange Flow Cytometry Assay Kit	Green (532 nm)	100 assays	15461094
Oxidative stress	CellROX Deep Red Flow Cytometry Assay Kit	Red	100 assays	15246066

More pack sizes are available

To learn more and to order, please contact your local Fisher Scientific sales representative, customer service team, or visit the Fisher Scientific website.

Protein Biology > Expression and Separation

Protein Expression

ExpiCHO Expression System

The Gibco™ ExpiCHO™ mammalian transient expression system marks a revolutionary leap forward in the transient production of recombinant proteins in CHO cells. This fully optimised system has been designed to deliver protein yields up to 3 g/L, which is higher than the best HEK293-based systems. The ExpiCHO system enables you to, rapidly and economically, access CHO-expressed proteins early in the drug development process, providing you with the highest confidence that transiently expressed drug candidates will mimic downstream biotherapeutics manufactured in CHO.

Learn more at: thermofisher.com/expicho



Expi293 Expression System

The Gibco™ Expi293™ Expression System is a fully optimised HEK 293 transient expression system providing rapid, gramme-per-litre protein yields in human cells:

- Based on human 293 cells, which offers the benefits of native folding and posttranslational modifications
- Cost-effective transient expression

Learn more at: thermofisher.com/exp293

Protein Separation

We offer several options for protein separation, including precast gels, reagents, and accessories for pour-your-own gels, ladders, electrophoresis chambers, and power supplies.



Learn more at: thermofisher.com/proteingels

Novex WedgeWell Tris-Glycine Gels

Invitrogen™ Novex™ WedgeWell™ Tris-Glycine gels are precast mini gels for separation of proteins by polyacrylamide gel electrophoresis (PAGE) allowing the use of Laemmli sample and running buffers. These gels enable high quality performance and separation of a wide range of proteins into well-resolved bands. Novex WedgeWell Tris-Glycine gels are designed for use in our Invitrogen™ Mini Gel Tank.

Bolt Bis-Tris Plus Gels

Invitrogen™ Bolt™ Bis-Tris Plus Gels are precast polyacrylamide gels designed for optimal separation of a broad molecular weight range of proteins under denaturing conditions. The high-capacity, wedge-well design accommodates more sample volume. Bolt gels are designed to deliver western blot performance superior to that of Tris-glycine-based gels.

Gel Tanks

The Invitrogen™ Bolt™ Mini Gel Tank is designed for more intuitive use and convenience compared to traditional electrophoresis tanks.

Ordering information

Description	Size	Cat. no.
ExpiCHO Expression System Kit	1 kit	15441923
Expi293 Expression System Kit	1 kit	13481059
Novex WedgeWell Tris-Glycine Gels	10 gels per box	Please choose products online
Bolt Bis-Tris Plus Precast Gels	10 gels per box	Please choose products online
Bolt Welcome Pack, 10-well	1 kit	15354604
Bolt Welcome Pack, 15-well	1 kit	15374604
Bolt Mini Gel Tank	1 unit	15320424

More pack sizes are available

To learn more and to order, please contact your local Fisher Scientific sales representative, customer service team, or visit the Fisher Scientific website.

Protein Biology > Transfer

Protein Transfer

We offer several gel transfer options: wet, 5- to 10-minute semi-dry, and the 7-minute dry transfer.



Pierce Power Blotter

The Thermo Scientific™ Pierce™ Power Blotter is designed specifically for rapid semi-dry transfer of 10-300 kDa proteins from polyacrylamide gels to nitrocellulose or PVDF membranes in 5 to 10 minutes. The Pierce Power Blotter features an integrated power supply optimised to enable consistent, high-efficiency protein transfer when used with commonly used precast or homemade gels (SDS-PAGE) and nitrocellulose or PVDF membranes.

- Fast – transfer proteins in 5-10 minutes
- Efficient transfer – transfer low-, medium- and high-MW proteins (10-300kDa) equivalent to or better than conventional semi-dry or wet transfer methods
- Integrated power supply – allows consistent high-efficiency protein transfer
- Easy-touch programming – access pre-programmed transfer protocols based on the number of gels, gel size and molecular weight range of proteins

Learn more at: thermofisher.com/powerblotter

Pierce 1-Step Transfer Buffer

Thermo Scientific™ Pierce™ 1-Step Transfer Buffer is designed for rapid semi-dry transfer of 10-300 kDa proteins from polyacrylamide gels (SDS-PAGE) to nitrocellulose or PVDF membranes using the Pierce Power Blotter.

Learn more at: thermofisher.com/transferbuffer

iBlot 2 Dry Blotting System

Transfer proteins quickly and efficiently from gel to membrane in 7 minutes or less. The Invitrogen™ iBlot™ 2 System is compatible with both polyvinylidene difluoride (PVDF) and nitrocellulose membranes, and has comparable performance to traditional wet transfer methods in a fraction of the time. Now, with a new touch screen, less consumable waste, and sturdy design, fast western transfer never looked better.

Learn more at: thermofisher.com/iblot2



Ordering information

Description	Size	Cat. no.
Pierce Power Blotter Welcome Pack (EU Plug)	1 unit	15319134
Pierce Power Blotter Welcome Pack (UK Plug)	1 unit	15309134
Pierce Power Blotter (EU Plug)	1 unit	15389114
Pierce Power Blotter (UK Plug)	1 unit	15379114
Pierce 1-Step Transfer Buffer	5 x 1 L	15225346
Western Blotting Filter Paper, Extra Thick, 7 cm x 8.4 cm	50 sheets	10165844
Western Blotting Filter Paper, Extra Thick, 8.5 cm x 9 cm	50 sheets	10074584
Western Blotting Filter Paper, Extra Thick, 8 cm x 13.5 cm	50 sheets	11766446
Western Blotting Filter Paper, Extra Thick, 20 cm x 20 cm	50 sheets	10675935
iBlot 2 Gel Transfer Device	1 unit	15217995
iBlot 2 Transfer Stacks, nitrocellulose, regular size	10 stacks	15296526
iBlot 2 Transfer Stacks, nitrocellulose, mini	10 stacks	15239296
iBlot 2 Transfer Stacks, PVDF, regular size	10 stacks	15249296
Blotting Roller	1 unit	10505003

More pack sizes are available

To learn more and to order, please contact your local Fisher Scientific sales representative, customer service team, or visit the Fisher Scientific website.

Protein Detection

We offer more than 40,000 primary and secondary antibodies, along with buffers and substrates for use in western blot analysis. In addition, the revolutionary Invitrogen™ iBind™ western systems provide hands-free convenience for primary and secondary antibody binding as well as all wash steps.

iBind Flex Western System

The Invitrogen™ iBind™ Flex Western System offers flexible blot processing to optimise antibody use, easily change formats, and reduce hands-on time.



Simply load primary and secondary antibody solutions and wash solutions into the device, then walk away, because the system automatically performs all immunodetection steps using sequential lateral flow technology, a simple form of capillary action. In less than 3 hours, the blot is ready for final detection.

Learn more at: thermofisher.com/ibindflex

Antibodies

The right antibodies are essential for clean, definitive, and reproducible western blot results. We offer more than 40,000 highly specific and sensitive primary and secondary antibodies to help you gather quality western blot data.



All of our antibodies are validated to perform in the stated application and species. HRP-, AP- or Alexa conjugated secondary antibodies are also available in various degrees of purity to meet all your western analysis needs.

- Specific to the target protein or antibody
- Sensitive to give you the level of detection you need
- Reliable to help you get great data every time
- Affordable to help you get the most out of your research dollar
- Validated to perform in the stated application and species

Our antibody search engine enables you to easily search by protein target and then filter by the specific assays that interest you: thermofisher.com/antibodies

Ordering information

Description	Size	Cat. no.
iBind Flex Western Device	1 device	15357268
iBind Flex Cards	10 cards	15367238
iBind Flex Fluorescent Detection (FD) Solution	1 kit	15317248
iBind Flex Solution	1 kit	15357248
Primary Antibodies	various	please choose products online
Secondary Antibodies	various	please choose products online

To learn more and to order, please contact your local Fisher Scientific sales representative, customer service team, or visit the Fisher Scientific website.

RNA Extraction

RNA^{later} Solutions for RNA Stabilisation and Storage

Invitrogen™ RNA^{later}™ solution is an aqueous, nontoxic tissue storage reagent that rapidly permeates tissues to stabilise and protect cellular RNA. It minimises the need to immediately process tissue samples or to freeze samples in liquid nitrogen for later processing. Tissue pieces can be harvested and submerged in RNA^{later} solution for storage without jeopardising the quality or quantity of RNA obtained.



Learn more at: thermofisher.com/rnalater

TRIzol RNA Isolation Reagents

Invitrogen™ TRIzol™ products are referenced in thousands of journal publications, reflecting the trust in TRIzol reagent to deliver high-quality, intact RNA from many kinds of biological materials. Available in several ready-to-use formats, the products in the TRIzol reagent family are tailored to isolate total RNA or to simultaneously isolate RNA, DNA, and protein from diverse biological sources, including samples of human, animal, plant, yeast, bacterial, and viral origin.



Learn more at: thermofisher.com/trizol

PureLink RNA Mini Kit

The Invitrogen™ PureLink™ RNA Mini Kit provides rapid column based purification of total RNA from a wide range of cell and tissue types.

- High-quality RNA in less than 20 minutes
- Up to 1,000 ug of purified RNA from a single extraction
- No hazardous organic (phenol/chloroform) extraction lysis

Learn more at: thermofisher.com/purelink

Reverse Transcription

Choosing the correct reverse transcriptase for cDNA synthesis is critical to obtaining high yields of quality, full-length cDNA with full gene representation. With thousands of citations, our reverse transcriptases are a first choice for cDNA synthesis.

SuperScript IV Reverse Transcriptase

The new Invitrogen™ SuperScript™ IV Reverse Transcriptase has all the high performance qualities you've come to expect from Invitrogen™ SuperScript™ III RT—plus it's been reengineered for increased robustness, offering:

- cDNA in as little as 10 minutes
- Up to 100x higher yield with degraded samples
- Higher sensitivity, especially with difficult and degraded samples

Learn more at: thermofisher.com/superscript

Maxima Reverse Transcriptases

Thermo Scientific™ Maxima™ and Maxima™ H Minus Reverse Transcriptases were developed through molecular evolution, which has enabled the introduction and selection of multiple favourable mutations in traditional M-MuLV reverse transcriptase to help maximise performance in cDNA synthesis.

Learn more at: thermofisher.com/maxima

Ordering information

Description	Size	Cat. no.
PureLink RNA Mini Kit	50 preps	10307963
PureLink RNA Mini Kit	10 preps	10359103
RNA ^{later} Stabilization Solution	100 mL	10564445
RNA ^{later} Stabilization Solution	20 x 5 mL	10381085
RNA ^{later} Stabilization Solution	50 x 1.5 mL	10620036
TRIzol Reagent	200 mL	12034977
TRIzol Reagent	100 mL	12044977
SuperScript IV Reverse Transcriptase	2,000 units	15387686
SuperScript IV Reverse Transcriptase	10,000 units	15307696
Maxima Reverse Transcriptase (200 U/μL)	2,000 units	10899010
Maxima Reverse Transcriptase (200 U/μL)	10,000 units	10869200

More pack sizes are available

To learn more and to order, please contact your local Fisher Scientific sales representative, customer service team, or visit the Fisher Scientific website.

Molecular Biology > Quantification and Amplification

Quantification

Qubit 3 Fluorometer

Small and affordable, yet capable of generating data with superior accuracy, sensitivity, and selectivity, the Invitrogen™ Qubit™ 3 Fluorometer brings the power of fluorescent quantitation to your bench. Assays for DNA, RNA, and protein quantitation are integrated into the system.



- Higher accuracy and sensitivity than UV absorbance
- Uses as little as 1 µL of sample
- Easy-to-use, larger touch-screen delivers superior responsiveness
- Powerful dual-core processor quickly calculates sample concentration and stores up to 1,000 sample results or reads

Learn more at: thermofisher.com/qubit

Amplification

We offer products to help you achieve PCR success for virtually any application. With trusted Applied Biosystems™ thermal cyclers and industry-leading end-point PCR enzymes, you'll find everything you need to help you achieve PCR success.

Phusion DNA Polymerases

Thermo Scientific™ Phusion™ High-Fidelity DNA Polymerases have established a new standard for high-fidelity PCR. Phusion DNA Polymerases have proven to be the first choice for several demanding PCR applications.

Learn more at: thermofisher.com/phusion

Platinum Taq DNA Polymerase

Invitrogen™ Platinum™ Taq DNA Polymerase is a hot-start enzyme trusted by researchers for robust, reliable amplification in PCR applications such as genotyping, gene expression profiling and next-generation sequencing.

- High specificity and increased yields with antibody-mediated hot-start PCR
- Convenient room-temperature reaction set-up
- Versions with green buffer enable direct gel loading

Learn more at: thermofisher.com/platinumtaq

DreamTaq DNA Polymerase

Experience the PCR performance no conventional Taq enzyme can match with Thermo Scientific™ DreamTaq™ DNA Polymerase. This enhanced Taq DNA polymerase is designed to consistently and reliably deliver greater sensitivity, better yields, and longer amplicons.



- Robust amplification with minimal optimisation
- Higher yields, sensitivity, and target length than conventional Taq enzymes
- Direct gel loading to simplify workflows

Learn more at: thermofisher.com/dreamtaq

MicroAmp Well Plates, PCR Tubes, PCR Strip Tubes, and Adhesive Films

Applied Biosystems™ MicroAmp™ plastics consumables are validated with Applied Biosystems™ instruments for optimal fit and performance and are available as 96-well plates, 384-well plates, strip tubes, caps and seals, single tubes, adhesive films, and more.



Learn more at: thermofisher.com/pcrplastics

Applied Biosystems™ ProFlex™ PCR System

High-performance thermal cycler with advanced flexibility and control

- Multiuser accessible—run 3 experiments at once with 3 independently controlled blocks
- Flexible block configuration—accepts five different block formats for optimisation and throughput, including the triple 32-well block with independent control
- Convenient remote access—connect to your instrument from anywhere with a free mobile app



Learn more at: thermofisher.com/proflex

Applied Biosystems™ Veriti™ PCR System

Easy-to-programme, robust thermal cycling, certified for IVD

- Temperature zones for PCR optimisation— features Applied Biosystems™ VeriFlex™ Blocks
- Easy to operate—easy-to-use graphical interface, fast protocol setup, and convenient protocol transfer with a USB memory stick
- Diagnostic version, Applied Biosystems™ Veriti™ Dx Thermal Cycler— also available for use in clinical applications*



Learn more at: thermofisher.com/veriti

Ordering information

Description	Size	Cat. no.
Qubit 3 Fluorometer		15387293
Qubit 3 Quantitation Starter Kit	1 kit	15397463
Platinum <i>Taq</i> Green Hot Start DNA Polymerase	120 x 50 µL rxns	15400574
Platinum <i>Taq</i> Green Hot Start DNA Polymerase	300 x 50 µL rxns	10792742
Platinum <i>Taq</i> Green Hot Start DNA Polymerase	600 x 50 µL rxns	15420574
Phusion Green High-Fidelity DNA Polymerase (2 U/µL)	100 units	13575160
Phusion Green High-Fidelity DNA Polymerase (2 U/µL)	500 units	13585160
Phusion Green Hot Start II High-Fidelity PCR Master Mix	100 units	15331732
Phusion Green Hot Start II High-Fidelity PCR Master Mix	500 units	15341732
Phusion High-Fidelity DNA Polymerase (2 U/µL)	100 units	10024537
Phusion High-Fidelity DNA Polymerase (2 U/µL)	500 units	10287787
Phusion Hot Start II High-Fidelity PCR Master Mix	100 units	15301732
Phusion Hot Start II High-Fidelity PCR Master Mix	500 units	15311732
ProFlex 96-well PCR System	1 unit	15137105
ProFlex 3 x 32-well PCR System	1 unit	15147105
ProFlex 2 x 96-well PCR System	1 unit	15102089
ProFlex 2 x 384-well PCR System	1 unit	15304502
Veriti 96-Well Fast Thermal Cycler	1 unit	12323653
Veriti 96-Well Thermal Cycler	1 unit	12333653
Veriti 384-Well Thermal Cycler	1 unit	12353653
Veriti 60-well Thermal Cycler (for 0.5 mL tubes)	1 unit	12343653
SimpliAmp Thermal Cycler	1 unit	15224438

More pack sizes are available

* The Veriti Dx Thermal Cycler is only available for in vitro diagnostic use in the US, Europe, and other selected countries.

To learn more and to order, please contact your local Fisher Scientific sales representative, customer service team, or visit the Fisher Scientific website.

Applied Biosystems™ SimpliAmp™ Thermal Cycler

Elegant design, smart choice

- Compact design—saves bench space
- Easy to operate—large, colour LCD touch-screen that simplifies operations
- Three independent temperature zones for PCR optimisation— features VeriFlex Blocks



Learn more at: thermofisher.com/simpliamp

Detection and Analysis

We've developed an expansive collection of tools and reagents for DNA and RNA gel electrophoresis. You'll find all the high-quality tools you need for dependable, accurate performance in your agarose gel electrophoresis and acrylamide gel electrophoresis experiments.

TopVision Agarose Tablets

Thermo Scientific™ TopVision™ Agarose Tablets, low EEO (LE), are a multi-purpose agarose in tablet format delivered in a convenient blister pack. The agarose tablets are made of standard melting point agarose that yields high resolution, sharp DNA bands with high clarity and low background. Their optimised gel strength enhances ease of gel processing and handling.



Learn more at: thermofisher.com/topvision

E-Gel EX Agarose Gels

Invitrogen™ E-Gel™ EX Gels are the fastest-resolving gels in the E-Gel™ product line. They are pre-cast 1% and 2% gels in the E-Gel format with 11 wells and a novel, openable format. The gels contain a proprietary fluorescent nucleic acid stain (excitation: 490 nm, emission: 520 nm) that can be viewed with blue light, which minimises DNA damage and allows detection down to 1 ng/band of DNA.

Learn more at: thermofisher.com/e-gel

SYBR Safe DNA Gel Stain

Invitrogen™ SYBR™ Safe DNA gel stain is a highly sensitive stain for visualisation of DNA in agarose or acrylamide gels. It is specifically formulated to be a less hazardous alternative to ethidium bromide that can be used with either blue-light or UV excitation. You can choose between a concentrate or a ready-to-use solution that can be used like an ethidium bromide solution and the stain is also suitable for staining RNA in gels.

Learn more at: thermofisher.com/sybrsafe

TrackIt DNA Ladders

Invitrogen™ TrackIt™ DNA Ladders are supplied premixed in loading buffer containing tracking dyes that run behind and ahead of the sample, ensuring the DNA bands will not be obscured by the dyes. They are stable at room temperature and can be stored on your benchtop. There is no need to heat, mix, or dilute these ladders prior to loading them on your gel.



Learn more at: thermofisher.com/trackit

GeneRuler DNA Ladders

Thermo Scientific™ GeneRuler™ DNA ladders are mixtures of chromatography-purified individual DNA fragments. The GeneRuler line includes the most popular ladders such as the 100 bp and 1 kb DNA Ladder.

Learn more at: thermofisher.com/dnaladders

Ordering information

Description	Size	Cat. no.
TopVision Agarose Tablets	200 tablets (0.5g each)	15225116
E-Gel EX Gel, 1%, 10-Pak	10 gels	11571186
E-Gel EX Gel, 2%, 10-Pak	10 gels	10043894
E-Gel EX Gel, 4%, 10-Pak	10 gels	10122338
E-Gel EX Starter Kit, 1%	1 kit	10480435
E-Gel EX Starter Kit, 2%	1 kit	10135444
SYBR Safe DNA Gel Stain in 0.5X TBE	1 L	10534623
SYBR Safe DNA Gel Stain in 1X TAE	1 L	10063352
SYBR Safe DNA Gel Stain	400 µL	10328162
TrackIt 1 Kb Plus DNA Ladder	100 applications	10540703
TrackIt 100 bp DNA Ladder	100 applications	10778594
GeneRuler 1 kb DNA Ladder	5 x 50 µg	11823963
GeneRuler 100 bp DNA Ladder	50 µg	10588170

More pack sizes are available

To learn more and to order, please contact your local Fisher Scientific sales representative, customer service team, or visit the Fisher Scientific website.

Molecular Biology > Cloning

Cloning

We offer powerful and versatile cloning and expression vectors and molecular biology essentials for that critical first step in your experiment.

Anza Restriction Enzyme Cloning System

The Invitrogen™ Anza™ Restriction Enzyme Cloning System is a complete system, comprised of 128 restriction enzymes + 5 DNA modifying enzymes. All Anza restriction enzymes work together cohesively and are fully functional with the single Anza buffer. The system offers:



- One buffer for all restriction enzymes
- One digestion protocol for all DNA types
- Complete digestion in 15 minutes
- Overnight digestion without star activity

Learn more at: thermofisher.com/anza

TOPO Cloning Technology

When Invitrogen™ TOPO™ cloning technology was launched, it sparked a revolution. Over the past 18 years, TOPO technology has become the most widely used cloning method in the world. TOPO cloning technology is:

- Efficient—up to 95% of clones contain desired insert
- Fast—5-minute, room temperature reaction
- Easy—simple 3-step procedure
- Proven—over 20,000 citations
- Flexible—available with or without competent cells, in multiple reaction sizes

Learn more at: thermofisher.com/topo

Ordering information

Description	Size	Cat. no.
Anza 5-Pack Starter Kit	1 kit	15521620
Anza 10-Pack Starter Kit	1 kit	15441933
Anza Alkaline Phosphatase	2000 reactions	15511620
Anza T4 DNA Ligase Master Mix	200 reactions	15501620
Anza T4 PNK Kit	500 reactions	15461935
TOPO TA Cloning Kit for Sequencing, with One Shot TOP10 Chemically Competent E. coli	25 reactions	10185122
TOPO TA Cloning Kit for Sequencing, without competent cells	25 reactions	11533127
TOPO TA Cloning Kit for Subcloning, with One Shot TOP10 chemically competent E. coli cells	25 reactions	15412344
TOPO TA Cloning Kit for Subcloning, without competent cells	25 reactions	11543147
Zero Blunt TOPO PCR Cloning Kit, with One Shot TOP10 Chemically Competent E. coli cells	25 reactions	10256812
Zero Blunt TOPO PCR Cloning Kit, without competent cells	10 reactions	15391527

More pack sizes are available

To learn more and to order, please contact your local Fisher Scientific sales representative, customer service team, or visit the Fisher Scientific website.

Real-Time Amplification

Instruments

Applied Biosystems™ real-time PCR instruments and reagents have been trusted in the lab for over 20 years by the world's top scientists. Researchers who demand efficiency, accuracy, and gold-standard technology use Applied Biosystems™ integrated systems for real-time PCR - from sample prep to data analysis.

StepOne and StepOne Plus Real-Time PCR Systems

The Applied Biosystems™ StepOne™ (48 well) and Applied Biosystems™ StepOnePlus™ (96 well) Real-Time PCR Systems are remarkably simple to use. Specifically designed with a user friendly, yet powerful interface, they are ideal for both new and experienced real-time PCR researchers. Despite their simplicity, the advanced technology will deliver you precise and reliable results every time.



- Advanced software and instrumentation for performing a wide array of genomic assays
- Sensitive 4-colour optical LED recording system
- Intuitive and robust software perfect for both first-time and advanced users
- Simple and flexible instrument set-up and usage

Learn more at: thermofisher.com/steponeplus

Assays

TaqMan Gene Expression Assays

Applied Biosystems™ TaqMan™ Gene Expression Assays consist of a pair of unlabelled PCR primers and an Applied Biosystems™ TaqMan™ probe with a FAM™ or VIC™ dye label on the 5' end and minor groove binder (MGB) and nonfluorescent quencher (NFQ) on the 3' end.



- Gold standard for sensitivity, specificity, reproducibility
- Pre-designed convenience of >2M assays across 21 species
- No need to validate or optimise assay conditions (UCC)
- Ready to use out of the box

Learn more at: thermofisher.com/taqman

TaqMan Advanced miRNA Assays

Applied Biosystems™ TaqMan™ Advanced miRNA Assays enable highly sensitive and specific quantification of mature miRNAs using qPCR. Together with the Applied Biosystems™ TaqMan™ Advanced miRNA cDNA Synthesis Kit, this solution provides a streamlined upfront workflow that is ideal for analysis of multiple miRNA targets from a single sample or low-level RNA samples such as serum and plasma.



- Universal RT—one RT step for all TaqMan Advanced miRNA Assays
- Sensitivity—detect as few as 60 copies input into cDNA synthesis
- Specificity—detect only the mature miRNA and distinguish between highly homologous targets
- Small sample input—detect and quantify mature miRNA from as little as 1pg of total RNA or 2 µL plasma
- Compatibility with biofluids including human serum, plasma, and tissue

Learn more at: thermofisher.com/taqman

Mastermixes

PowerUp SYBR Green Master Mix

Applied Biosystems™ PowerUp™ SYBR™ Green Master Mix is a pre-formulated, optimised universal 2X master mix for real-time PCR workflows. It is designed for exceptional performance for your most challenging real-time PCR applications using any real-time PCR instrument:

- Exceptional specificity with dual hot-start mechanism
- Tight reproducibility in Ct values over a broad dynamic range
- Compatible with standard or fast cycling for results typically in <50 minutes
- Formulated with uracil N-glycosylase (UNG) and dUTP to help prevent contamination of carryover PCR products
- Room temperature stable for 72 hours after plates are prepared for qPCR

Learn more at: thermofisher.com/sybr

TaqMan Fast Advanced Master Mix

Applied Biosystems™ TaqMan™ Fast Advanced Master Mix has been designed to match or exceed the performance of standard master mixes, delivering shorter run times (<40 minutes) with results equal to or better than what is achieved today.

- Best-in-class performance
- Engineered for enhanced benchtop stability
- Optimised for multiplexing
- Reduced run times on fast and standard instrumentation
- Seamlessly transitions into your experiments

Learn more at: thermofisher.com/mastermix

TaqMan Fast Virus 1-Step Master Mix

Applied Biosystems™ TaqMan™ Fast Virus 1-Step Master Mix is designed for reliable, high-sensitivity real-time PCR even in the presence of common reaction inhibitors. The features of the kit have been selected to enhance virus detection on commonly used sample types. A single-tube format allows for uniform handling and processing for both RNA and DNA viruses.

- One-tube, one-step 4X master mix to amplify both RNA and DNA with high sensitivity
- Formulated to handle common RT-PCR inhibitors found in blood, stool, and other difficult samples
- Single run profile with RNA and DNA, and on any supported instrument, which allows for easy mix-and-match of targets on a plate
- Works in singleplex, multiplex, and with exogenous or endogenous internal controls
- Increased qRT-PCR speed on fast and on standard instruments

Learn more at: thermofisher.com/mastermix

TaqMan Genotyping Master Mix

The Applied Biosystems™ TaqMan™ Genotyping Master Mix is optimised for end-point fluorescence detection in SNP genotyping applications.

- Distinct clusters and high call rates for unambiguous allelic discrimination
- Validated with Applied Biosystems™ TaqMan™ SNP Genotyping Assays
- Excellent pre- and post-PCR stability for high throughput setup and analysis

Learn more at: thermofisher.com/mastermix

Real-Time PCR Handbook

Download our free handbook and learn the basic principles from theory to design for real-time PCR, specifically:

- Basic principles of real-time PCR
- Assay design
- Data analysis
- Frequently asked questions and troubleshooting tips

Download your copy today at:

thermofisher.com/qpcrhandbook

Ordering information

Description	Size	Cat. no.
PowerUp SYBR Green Master Mix	5 mL	15350929
PowerUp SYBR Green Master Mix	50 mL	15360929
PowerUp SYBR Green Master Mix	2 x 1 mL	15366158
TaqMan Fast Advanced Master Mix	1 x 1 mL	13428456
TaqMan Fast Advanced Master Mix	1 x 5 mL	11380912
TaqMan Fast Advanced Master Mix	1 x 50 mL	13418456
TaqMan Fast Virus 1-Step Master Mix	1 x 1 mL	13498446
TaqMan Fast Virus 1-Step Master Mix	1 x 10 mL	12053715
TaqMan Genotyping Master Mix	1 x 1 mL	10390065
TaqMan Genotyping Master Mix	1 x 10 mL	10025894
TaqMan Genotyping Master Mix	1 x 50 mL	10742877
Single Tube TaqMan Gene Expression Assay	10	10794597
TaqMan Advanced miRNA Assay	10	15412184
TaqMan Advanced miRNA cDNA Synthesis Kit	50 reactions	15451034
StepOnePlus Real-Time PCR System	1 unit	15341295
StepOne Real-Time PCR System	1 unit	15311295

More pack sizes are available

To learn more and to order, please contact your local Fisher Scientific sales representative, customer service team, or visit the Fisher Scientific website.

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