Lot 9

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III. PCR master mix
IV. Nitrocellulose Membrane
V. 30% acrylamide/ bis 37.5:1 solution
VI. Bradford assay
VII. 2-Mercaptoethanol
VIII. Chemiluminescent Western Blot ECL Substrate
IX. Ammonium Persulfate (APS)
X. TEMED
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I. SYBR Green Supermix

2X qPCR master mix for SYBR Green–based real-time PCR applications, suitable for approximately 2,500 × 20 µL reactions (or equivalent). Contains DNA polymerase, dNTPs, $MgCl_2$, SYBR Green dye, stabilizers, enhancers, and passive reference dye compatibility.

- Hot-start DNA polymerase technology
- Blend of passive reference dyes for universal real-time instrument compatibility
- Compatible with major real-time PCR instruments including Bio-Rad, Applied Biosystems, Roche, QIAGEN, Eppendorf, and Stratagene systems, or equivalent
- Suitable for amplification of cDNA, genomic DNA, and plasmid DNA
- High amplification efficiency and sensitivity
- Stable under repeated freeze–thaw cycles

II. cDNA Synthesis Kit

cDNA synthesis kit for reverse transcription of RNA to first-strand cDNA, suitable for approximately 100 × 20 µL reactions or equivalent.

- Two-component format including reaction mix and reverse transcriptase enzyme
- Detect low-level target genes and conserve RNA during gene expression analysis — broad linear dynamic range of total input RNA (1 µg–1 pg) with a highly efficient RNase H+ MMLV reverse transcriptase
- Utilize dilute RNA samples —format allows up to 15 µl of RNA sample in a 20 µl cDNA synthesis reaction
- Prevent 5' and 3' bias of your target genes and design primers in any region — optimum blend of oligo(dT) and random primers in the 5x supermix
- Avoid skewed data from RNA degradation — potent blend of RNaseA inhibitor protects RNA during setup and reverse transcription
- Complete cDNA synthesis and qPCR on the same day — fast 26 minute cDNA synthesis protocol

III. PCR master mix

5X Master Mix 7.5mM Ready to load 250x20ul rxns

- Contains thermostable Taq DNA polymerase
- Includes $MgCl_2$, dNTPs, and optimized reaction buffer
- Non-hot-start formulation
- Ready-to-load format suitable for direct gel electrophoresis
- Suitable for routine PCR applications
- Compatible with amplification from genomic DNA, plasmid DNA, and cDNA templates
- Suitable for amplification of DNA fragments up to approximately 5 kb
- Suitable for T/A cloning applications
- Requires only addition of template DNA, primers, and nuclease-free water
- For research use only
- Equivalent products acceptable

IV. Nitrocellulose Membrane

Nitrocellulose membrane Pkg of 1 roll for protein and nucleic acid blotting applications.

- Pore size: 0.2 µm
- Dimensions: approximately 30 cm × 3.5 m
- Pure unsupported nitrocellulose membrane
- Suitable for transfer and immobilization of proteins and nucleic acids
- High protein binding capacity
- Low background and high signal-to-noise ratio

- Suitable for low molecular weight proteins, ssDNA, and RNA transfer applications
- Roll format
- Mixed ester membranes not acceptable

V. 30% acrylamide/ bis 37.5:1 solution

30% acrylamide/bis-acrylamide, 37.5:1 (2.7% crosslinker) solution; a faster and safer alternative to handling powdered acrylamide and bis-acrylamide. 500ml
Ready-to-use high-purity (99.9%) solution

VI. Bradford assay

- 450 ml, colorimetric assay dye, concentrate, used for total protein concentration measurement
- Colorimetric assay based on the Bradford method, where the dye (Coomassie Brilliant Blue G-250) binds to proteins, causing a color shift from brown to blue that can be measured by a spectrophotometer
- High Reliability
- Excellent for Contaminated Samples

VII. 2-Mercaptoethanol

25 ml, ≥98% pure 2-mercaptoethanol (14.2 M)

VIII. Chemiluminescent Western Blot ECL Substrate

Enhanced chemiluminescent (ECL) substrate for detection of HRP-conjugated antibodies in Western blot applications.
Specifications:

- Two-component luminol/peroxide reagent system
- Total volume approximately 500 mL (2 × 250 mL) or equivalent
- Compatible with HRP-conjugated secondary antibodies
- Suitable for digital imaging and X-ray film detection methods
- High sensitivity detection suitable for low- and high-abundance protein targets
- Stable signal generation with low background
- Suitable for research use applications

IX. Ammonium Persulfate (APS)

10 g, ammonium persulfate (APS) catalyst

- Used as a catalyst for polymerization of acrylamide and bis-acrylamide.
- Oxidizing agent frequently used with another catalyst, TEMED, for preparation of polyacrylamide gels for protein and nucleic acid analysis.

X. TEMED

TEMED (tetramethylethylenediamine) 50 ml, for catalyst for polyacrylamide gels

- Used as a catalyst for the polymerization of acrylamide and bis-acrylamide.
- Frequently used with another catalyst, APS, for the preparation of polyacrylamide gels for the protein and nucleic acid analysis.

XI. 4x Laemmli Sample Buffer

10 ml, premixed 4x Laemmli protein sample buffer for SDS-PAGE
Used for preparation of samples for SDS PAGE.

XII. Ponceau S Protein Staining Solution

- 500 ml
- Ready-to-use membrane stain for evaluating the transfer efficiency of a western blot.
- Recommended for rapid and reversible protein staining on nitrocellulose or PVDF membranes.
- Ponceau S staining is reversible and can be removed with a short incubation in 0.1% NaOH.

XIII. Mini Thick Blot Paper, 7.5 x 10 cm

Mini Thick Blot Paper, 7.5 x 10 cm, 50 sheets

- Pkg of 50, 7.5 x 10 cm, absorbent filter paper, for use with Mini Trans-Blot cassette
- High-wet-strength blot absorbent filter paper in blotting applications as part of the gel, membrane, and filter paper stack, or sandwich.
- Precut to fit the Mini Trans-Blot® Cassette and can be used with any semi-dry or wet transfer blotting system.
- Made of 100% cotton fiber
- Produced using ultrapure water and contain no additives
- Suitable for use with alcohol and other organic solvents
- Provide a uniform flow of buffer through the gel to the transfer membrane in a blotting sandwich

XIV. Foam Pads for Mini Trans-Blot Cell 8 x 11 cm

- Pkg of 4, 8 x 11 cm, replacement pads for use with Mini Trans-Blot Cell
- Used for wet/tank blotting with the Mini Trans-Blot Cell.
- Blot proteins or nucleic acids from either agarose or acrylamide gels.
- The Mini Trans-Blot Module accommodates two cassettes and the tank is interchangeable with the Mini-PROTEAN® Tetra System.

XV. PCR Grade Water

- PCR Grade Water 25 ml
- Type 1 ultrapure water
- Membrane-filtered
- Not DEPC-treated
- Free of nucleases, DNA, RNA and other organics

XVI. 96-Well PCR Plates white/white

96-Well PCR Plates, low profile, thin wall, skirted, white/white, barcoded Pkg of 50, white shell/white well, , rigid 2-component design

- Compatible instruments; Bio-Rad (CFX96™, DNA Engine®, DNA Engine Opticon®, and Chromo4™ PCR systems, and series 1000 and PTC-100 thermal cyclers) and Eppendorf (Mastercycler PCR system series)
- Superior stability and flatness allow precise positioning and robotic handling
- Sturdy plate design is ideal for heat sealing methods
- Warp-resistant feature provides durability during automation, high-speed centrifugation, and storage (even at –80°C)
- User-readable bar code for convenient sample tracking in high-throughput settings
- Black alphanumeric labeling for easy well identification
- Footprint and well spacing designed to match ANSI/SBS standard dimensions
- Composition helps prevent DNA binding
- Polypropylene resin allows superior well-to-well uniformity for reliable and reproducible real-time qPCR results
- Certified to be free of DNase, RNase, and human genomic DNA
- Maximum volume is up to 200 µl
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XVII. 96-Well PCR Plates white /clear

- PCR 96-Well Plates, low profile, thin wall, skirted, white/clear Pkg of 50, white shell/clear well, rigid 2-component design
- Compatible instruments; Bio-Rad (CFX96™, 1000-series, DNA Engine Opticon® series, Chromo4™, PTC-100®, DNA Engine® series) and Eppendorf (Mastercycler series)
- Superior stability and flatness allow precise positioning and robotic handling
- Sturdy plate design is ideal for heat sealing methods
- Warp-resistant feature provides durability during automation, high-speed centrifugation, and storage (even at –80°C)
- User-readable bar code options for convenient sample tracking in high-throughput settings
- Black alphanumeric labeling for easy well identification
- Footprint and well spacing designed to match ANSI/SBS standard dimensions
- Composition helps prevent DNA binding
- Polypropylene resin allows superior well-to-well uniformity for reliable and reproducible real-time qPCR results
- Certified to be free of DNase, RNase, and human genomic DNA
- Maximum volume is up to 200 µl

XVIII. 384-Well PCR Plates clear/white

- 384-Well PCR Plates, thin wall, skirted, clear/white, Pkg of 50
- Pkg of 50, rigid 2-component design
- Format: 384-well, full skirt
- Dimensions: 127.76 mm (L) x 85.48 mm (W) x 10.40 mm (H)
- Well Volume: 50 µl (maximum), 1–30 µl (recommended)
- Well Depth: 9.35 mm
- Well Diameter: 3.10 mm
- Material: Polycarbonate frame (hard-shell) with thin-wall polypropylene wells
- Compatibility: Designed for high-speed PCR and automated robotic systems

XIX. Optical Adhesive PCR Plate Seals

- Pkg of 100, optically clear seal for PCR plates used in real-time and conventional PCR reactions
- For thermal cycling in thin-wall PCR plates.
- Suitable for unskirted or semi-skirted PCR plates and automated plate handlers
- Clear polyester film — ideal for use with real-time PCR detection systems
- Effective from 40°C to 110°C.
- Free of DNase, RNase, and human DNA

XX. 1.5mm electrophoresis comb 15 well

- 15-well, 1.5 mm thickness, 40 µl sample volume Pkg of 5, combs for Mini-PROTEAN Electrophoresis Cell, use with 1.5 mm glass plates
- Well Number: 15
- Thickness: 1.5 mm
- Used with spacer plates with integrated 1.5 mm spacers (1653312) for preparing gels with the Mini-PROTEAN Tetra Handcast Systems and Mini-PROTEAN 3 Multi-Casting Chamber.

XXI. 1.5 mm electrophoresis comb 10m wells

- 10-well, 1.5 mm thickness, 66 µl sample volume Pkg of 5, combs for Mini-PROTEAN Electrophoresis Cell, use with 1.5 mm glass plates
- Well Number: 10
- Thickness: 1.5 mm
- Used with spacer plates with integrated 1.5 mm spacers (1653312) for preparing gels with the Mini-

PROTEAN Tetra Handcast Systems and Mini-PROTEAN 3 Multi-Casting Chamber.

XXII. Glass slides 1.5 mm for western

- Pkg of 5, short plate for Mini-PROTEAN Tetra System and Mini-PROTEAN 3 Multi-Casting Chamber
- Combine short plates with spacer plates to form the gel cassette sandwiches for casting polyacrylamide gels. These plates can be used for casting gels using a Mini-PROTEAN Tetra System Casting Frame and Stand, or a Mini-PROTEAN 3 Multi-Casting Chamber.

XXIII. Glass spacer 1.5 mm for western

- Pkg of 5, spacer plate with 1.5 mm integrated spacer, for Mini-PROTEAN Tetra System and Mini-PROTEAN 3 Multi-Casting Chamber
- Use Mini-PROTEAN Spacer Plates with short plates to form cassette sandwiches when casting polyacrylamide gels. These plates can be used for casting gels with a Mini-PROTEAN Tetra System Casting Frame and Stand, or a Mini-PROTEAN 3 Multi-Casting Chamber.

XXIV. TC20 Cell Counting Slides; 2-well slides

30 slide pack of dual-chamber slides (60 counts), each slide can provide counts for 2 separate samples or dilutions, for use with TC10™ or TC20™ automated cell counter
Counting parameters – range 5 x 104 – 1 x 107 cells/ml and 6 – 50 µm cell diameter
Each chamber only requires 10 µl of suspended cells
Volume counted in each chamber is 0.4 µl (equivalent to four 1 x 1 mm squares of a manual hemocytometer)
Both chambers can be loaded prior to insertion
Chambers labeled A and B, with arrow next to chamber indicating direction of slide insertion
The counting slides are disposable polygon plastic with a dual chamber composed of polymethyl methacrylate (PMMA). Each slide is 75 × 25 × 1.8 mm (W x D x H) with a chamber depth of 100 µm.

XXV. Multichannel micropipetter 0.5-10 µl (for 96 wells)

- Multichannel (8 channel)
- Magnet Assisted Piston
- Accurate and Precise, calibrated to ISO 8655-6 standard
- Ergonomic Design to reduce hand strain during repetitive pipetting
- Low plunger and tip ejection force for improved user comfort
- Large 4-Digit Display
- Durable Construction, and Corrosion-resistant materials suitable for long-term and routine laboratory use
- Fully autoclavable and UV-resistant and do not need recalibration after sterilization for longer period of time.
- Volume adjustment with lock mechanism
- Color-coded Knobs, make it easy to identify and sort individual pipettes
- Universal Tip Compatibility

XXVI. Multichannel micropipetter 2-20 µl (for 96 wells)

- Multichannel (8channel)
- Magnet Assisted Piston
- Accurate and Precise, calibrated to ISO 8655-6 standard
- Ergonomic Design to reduce hand strain during repetitive pipetting
- Low plunger and tip ejection force for improved user comfort
- Large 4-Digit Display
- Durable Construction, and Corrosion-resistant materials suitable for long-term and routine laboratory use
- Fully autoclavable and UV-resistant and do not need recalibration after sterilization for longer period of time.

- Volume adjustment with lock mechanism
- Color-coded Knobs, make it easy to identify and sort individual pipettes
- Universal Tip Compatibility

XXVII. Multichannel micropipetter 20-200 µl (for 96 wells)

- Multichannel (8 channel)
- Magnet Assisted Piston
- Accurate and Precise, calibrated to ISO 8655-6 standard
- Ergonomic Design to reduce hand strain during repetitive pipetting
- Low plunger and tip ejection force for improved user comfort
- Large 4-Digit Display
- Durable Construction, and Corrosion-resistant materials suitable for long-term and routine laboratory use
- Fully autoclavable and UV-resistant and do not need recalibration after sterilization for longer period of time.
- Volume adjustment with lock mechanism
- Color-coded Knobs, make it easy to identify and sort individual pipettes
- Universal Tip Compatibility

XXVIII. Multichannel micropipetter 120 - 1200 µl

- Multichannel (8 channel)
- Magnet Assisted Piston
- Accurate and Precise, calibrated to ISO 8655-6 standard
- Ergonomic Design to reduce hand strain during repetitive pipetting
- Low plunger and tip ejection force for improved user comfort
- Large 4-Digit Display
- Durable Construction, and Corrosion-resistant materials suitable for long-term and routine laboratory use
- Fully autoclavable and UV-resistant and do not need recalibration after sterilization for longer period of time.
- Volume adjustment with lock mechanism
- Color-coded Knobs, make it easy to identify and sort individual pipettes
- Universal Tip Compatibility

XXIX. Multichannel pipette reservoir 10 ml

- (5x100)
- Made of high-quality polystyrene with high durability and reliability
- Stable base to prevent tipping during use
- Graduated markings for a precise liquid handling, reducing waste and improving accuracy in experiments
- Angled internal design to facilitate efficient liquid collection
- Designed to minimize reagent waste during multichannel pipetting
- Stackable design for space-efficient storage

XXX. Multichannel pipette reservoir 25 mL

- (5x100)
- Made of high-quality polystyrene with high durability and reliability
- Stable base to prevent tipping during use
- Graduated markings for a precise liquid handling, reducing waste and improving accuracy in experiments
- Angled internal design to facilitate efficient liquid collection
- Designed to minimize reagent waste during multichannel pipetting
- Stackable design for space-efficient storage

XXXI. Gel loading pipette tips for protein electrophoresis

protein Electrophoresis Gel Loading Tips Racks 8x96
Optimised fit and easy tip ejection – improved cone geometry for a secure fit
Quick and easy volume check – graduation marks on tip at standard volumes
Precise pipetting without loss of sample – conical tip opening prevents drop formation at the end of the tip
High-quality material – tips made of autoclavable, non-wettable, virgin polypropylene. US FDA Virgin Polypropylene without any traces of heavy metals (FDA approved 21 CFR)
Easy identification of pipette tips – colour-coded racks allows the quick and easy identification of the pipette tip and a suitable pipette

XXXII. Electrophoresis and transfer set for western

The system can accommodate precast and handcast gels: handcast gel size (8.3x7.3 cm), precast gel size (8.6x6.8 cm)
The system can run 1,2,3 or 4 gels simultaneously
The tank contains built-in guides for correct placement of the electrode assemblies, buffer level indicators for 2 and 4 gels, clear markings for proper electrode alignment, and handy tabs for precise, easy placement and removal of the lid.
The system should have the best-in-class hand casting capability with the following features:
• Ground glass plates with permanently bonded spacers to guarantee perfect alignment and leak free casting.
• Casting frames with simple cam closure to provide precision alignment on any flat surface.
• Thermoplastic casting gaskets that form a tight seal with the glass plates to assure leak free casting.
• Plastic combs that do not inhibit polymerization, and have a built in ridge to eliminate air contact during gel casting for uniform gel polymerization.
• Glass plates and combs labeled with thickness and number of wells for instant identification
• Side by side casting stand to allow access to both gels simultaneously, and the spring loaded lever creates a tight seal against the thermoplastic gasket.
10-well, 1 mm thick comb and a special sample loading guide should be included
2 sets of glass plates should be delivered with standard delivery; 1st set includes 5 short inner glass plates. The 2nd set includes 5 Spacer glass plates 1 mm thick. Ground-glass plates with permanently bonded spacers guarantee perfect alignment and leak-free casting, in addition thick glass plates reduce breakage.
Two side-by side casting stands, four casting frames and four gaskets should be delivered with the system. To allow the casting of1-4 gels and ensure no leakage is present during casting.
The system should accomodate Interchangeable modules to convert the electrophoresis cell from one application to another. Each module should fit into the same buffer tank and lid to form a complete cell. The four modular configurations are:
• for running handcast or precast PAGE and SDS-PAGE gels.
• for western blotting capable of transferring 1-2 gels simultaneously
• Electro-eluter for electroelution of sample bands or entire lanes for protein recovery
• 2-D electrophoresis cell for first dimension IEF tube gels in 2-D applications.
The module should provide rapid, high-quality blotting of the system handcast and precast gels.
The transfer system should Transfer 2 10 x 7.5 cm gels in just 1 hr; low-intensity overnight transfers are also possible
The module should include Wire electrodes placed 4 cm apart provide strong electrical fields and efficient protein transfer
The module should include color-coded cassettes and electrodes ensure proper orientation of the gel during transfer

XXXIII. Filter tips for 384-well plates

0.2-50µl, long, low retention, racked, sterile, filtered tips (5x10x384)
Designed for use with 16, 48, and 64-channel pipettes
Universal compatibility to the majority of pipette brands on the market
Different lengths for different applications within the same volume range
Crystal clear, incremental marks for convenience of use
Absolutely no compromise made on quality parameters
Certified RNase, DNase, DNA and Pyrogen-free
Made from USP CLASS VI Certified Polypropylene Material

Lot10

I. RECOVERALL(TM) TOTAL NA ISOLATION 40RXNS
II. MIRVANA(TM) MIRNA ISOLATION 40RXNS
III. QuantStudio Absolute Q MAP16 PLATE KIT (12 plates)
IV. ABSOLUTE Q DNA DIGITAL PCR MIX 360 UL (200 reactions)
V. ABI ABS Q MAP16 RT-DPCR MM KIT 192 RXNS
VI. TAQMAN MICROBE ASSAY POOLED (250 reactions)
VII. TaqMan™ Microbe Assay Type 3, Small (250 reactions/250 µL)
VIII. TaqMan™ Gene Expression Assay (FAM), S(250 reactions)

I. RECOVERALL(TM) TOTAL NA ISOLATION 40RXNS

The RecoverAll™ Total Nucleic Acid Isolation Kit for FFPE is for the extraction of total nucleic acid from formalin- or paraformalin-fixed, paraffin-embedded (FFPE) tissues. Sufficient reagents are included for 40 purifications from up to four 20 µm sections, or up to 35 mg of unsectioned, core samples each

II. MIRVANA(TM) MIRNA ISOLATION 40RXNS

The mirVana™ miRNA Isolation Kit uses a rapid procedure to isolate small RNAs from tissue and cells using an efficient glass fiber filter (GFF)-based method. The method isolates total RNA ranging in size from kilobases down to 10-mers. Each kit contains sufficient reagents and consumables for either 40 isolations of total RNA (including small RNAs), or 20 separate large and small RNA fractions. Phenol must be purchased separately.

III. QuantStudio Absolute Q MAP16 PLATE KIT (12 plates)

QuantStudio Absolute Q MAP16 Plate Kit is a key component of the QuantStudio Absolute Q Digital PCR System. The system is powered by the patented microfluidic array plate (MAP) technology that enables consistent and automated separation of the sample into 20,000 microchambers with industry leading <1% coefficient of variation (CV). For use with the following sample types: Cell lysates, Tissue lysates

IV. ABSOLUTE Q DNA DIGITAL PCR MIX 360 UL (200 reactions)

Absolute Q DNA Digital PCR Master Mix (5X) is optimized for use with the QuantStudio Absolute Q Digital PCR System and Applied Biosystems digital PCR (dPCR) assays in a simple workflow with minimal processing steps. The 5X formulation enables analysis of higher sample volumes and delivers accurate quantification of DNA targets without using a standard curve.

V. ABI ABS Q MAP16 RT-DPCR MM KIT 192 RXNS

Absolute Q MAP16 Plate Kit and 1-Step RT-dPCR Master Mix is a key component of the QuantStudio Absolute Q Digital PCR System. This package includes MAP16 microinjection-molded plates & Absolute Q 1-step RT-dPCR Master Mix (4X), which is optimized for use with the QuantStudio Absolute Q Digital PCR System in a simple workflow with minimal processing steps. The 4X formulation enables analysis of higher sample volumes and helps deliver accurate quantification of RNA targets without using a standard curve.

VI. TAQMAN MICROBE ASSAY POOLED (250 reactions)

TaqMan Microbe Detection assays are used for quantitative real-time PCR detection of microbial species. These assays consist of up to four pooled unlabeled PCR primers and TaqMan probes with a dye label (FAM) on the 5' end and a minor groove binder (MGB) and non-fluorescent quencher (NFQ) on the 3' end.

VII. TaqMan™ Microbe Assay Type 3, Small (250 reactions/250 µL)
The assay is designed to one or more microbial sequences to maximize coverage of the target organism.
VIII. TaqMan™ Gene Expression Assay (FAM), S(250 reactions)
TaqMan Gene Expression assays are used for quantitative real-time PCR or digital PCR analysis of gene expression and consist of a pair of unlabeled PCR primers and a TaqMan probe with a dye label (FAM) on the 5' end and a minor groove binder (MGB) and non-fluorescent quencher (NFQ) on the 3' end