Accuris™ Life Science Reagents is a division of Benchmark Scientific

ACCURIS™
LIFE SCIENCE REAGENTS

LIFE SCIENCE REAGENTS CATALOG

POLYMERASES, MASTER MIXES, & DNA LADDERS



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ABOUT **ACCURIS™**

Accuris is pleased to present our new Life Science Reagents catalog. Since our inception, we have been providing research laboratories with innovative, cost effective products and solutions designed to improve laboratory efficiency, safety, and results.

Our emphasis on next generation technology, quality, and value has served our customers and our company well. As a result of recent growth, we have expanded our facilities, our staff, and our product lines to serve you better. We welcome your questions, suggestions, and comments.

Accuris is a division of Benchmark Scientific.

ALSO AVAILABLE FROM ACCURIS INSTRUMENTS

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ACCURIS™
LIFE SCIENCE REAGENTS

Explore our intuitive **PCR Selector Tool** to quickly find **PCR enzymes** based on application or cross reference.

Visit
pcrselector.accuris-usa.com

to get started.

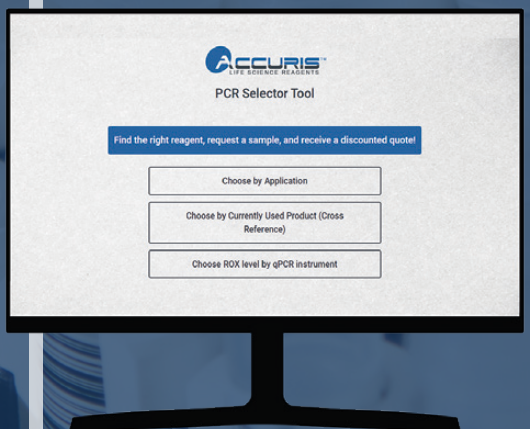


TABLE OF **CONTENTS**

1. ENDPOINT PCR 04

Taq DNA Polymerase & Master Mix 4
Hot Start Taq Polymerase & Master Mix 5
High Fidelity Taq Polymerase & Master Mix 6
1-Hour Mammalian Genotyping Kit 7
dNTP Sets & Mixes 7
One-Step RT-PCR Kit 8

2. REAL TIME PCR 09

qMAX™ Green qPCR Mix 9
qMAX™ Probe qPCR Mix 9
qMAX™ Probe One-Step RT-qPCR Kit 10
qMAX™ Probe One-Step Multiplex RT-qPCR Kit 10
qMAX™ Green One-Step RT-qPCR Kit 11

3. cDNA SYNTHESIS 12

qMAX™ cDNA Synthesis Kit 12
qMAX™ First Strand cDNA Synthesis Kit 12

4. ELECTROPHORESIS 13

SmartCheck™ DNA Ladders 13
SmartGlow™ DNA Stains 13
SmartCheck™ Protein Markers 14

ACCURIS™ LIFE SCIENCE REAGENTS

Taq DNA Polymerase

- Two-tube formulation: Taq DNA Polymerase & 5X buffer
- Improved template affinity and solubility for higher enzyme activity and greater yields.
- Exhibits 5'->3' exonuclease activity
- High performance with gDNA & GC- & AT-rich sequences



PR1000-500

Each 500 unit kit includes:

- 1 tube of Taq DNA Polymerase (5 U/µL)
- 4 tubes of 5X buffer (PCR enhancers & 15mm $MgCl_2$)

Cat No.	Description
PR1000-500	Taq DNA Polymerase, 500 units
PR1000-1000	Taq DNA Polymerase, 1000 units
PR1000-6000	Taq DNA Polymerase, 6000 units

dNTPs not included but available separately (see page 7)

Applications:

- Colony PCR
- Fast PCR
- Genotyping
- High-throughput PCR
- Routine PCR

Taq 2X Master Mix

- Single-tube formulation: Ready to use 2X Master Mix.
- High performance with gDNA & GC-rich sequences



PR1001-R-200

Each mix includes:

- Taq DNA Polymerase
- Buffer [PCR Enhancers, 2mM dNTPs, 6mM $MgCl_2$, inert red gel loading dye for direct gel loading (optional)]

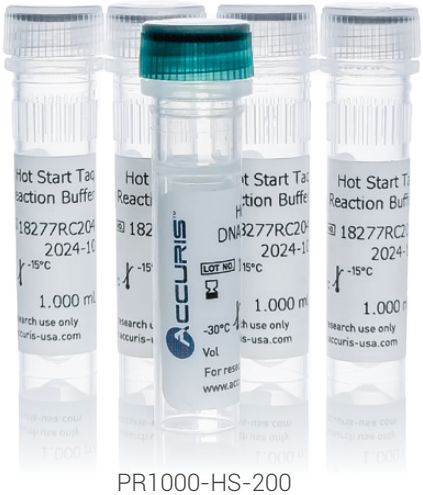
Applications:

- Colony PCR
- Fast PCR
- Genotyping
- High-throughput PCR
- Routine PCR

Cat No.	Description
PR1001-200	Taq 2X Master Mix, 200 reactions (4 x 1.25mL)
PR1001-1000	Taq 2X Master Mix, 1000 reactions (20 x 1.25mL)
PR1001-R-200	Taq 2X Red Dye Master Mix, 200 reactions (4 x 1.25mL)
PR1001-R-1000	Taq 2X Red Dye Master Mix, 1000 reactions (20 x 1.25mL)

Hot Start Taq DNA Polymerase

- Two-tube formulation: Hot Start Taq DNA Polymerase & 5X buffer
- Allows for reaction set-up at room temperature without the risk of non-specific amplification
- Optimized buffer for fast cycling & reproducibility
- High performance with gDNA & GC-rich sequences



PR1000-HS-200

Each 500 unit kit includes:

- 1 tube of Hot Start Taq DNA Polymerase (5 U/µL)
- 4 tubes of 5X buffer (PCR enhancers & 15mM $MgCl_2$)

Cat No.	Description
PR1000-HS-500	Hot Start Taq DNA Polymerase, 500 units
PR1000-HS-1000	Hot Start Taq DNA Polymerase, 1000 units
PR1000-HS-6000	Hot Start Taq DNA Polymerase, 6000 units

dNTPs not included but available separately (see page 7)

Applications:

- Colony PCR
- Fast PCR
- GC-rich DNA Amplification
- Low Copy PCR
- Multiplex PCR

Hot Start Taq 2X Master Mix

- Single-tube formulation: Ready to use 2X Master Mix.
- Allows for reaction set-up at room temperature without the risk of non-specific amplification
- High performance with gDNA & GC-rich sequences



PR1001-HSR-200

Each mix includes:

- Taq DNA Polymerase
- Buffer (PCR Enhancers, 2mM dNTPs, 6mM $MgCl_2$, inert red gel loading dye for direct gel loading (optional)

Applications:

- Colony PCR
- Fast PCR
- GC-rich DNA Amplification
- Low Copy PCR
- Multiplex PCR

Cat No.	Description
PR1001-HS-200	Hot Start Taq 2X Master Mix, 200 reactions (4 x 1.25mL)
PR1001-HS-1000	Hot Start Taq 2X Master Mix, 1000 reactions (20 x 1.25mL)
PR1001-HSR-200	Hot Start Taq 2X Red Dye Master Mix, 200 reactions (4 x 1.25mL)
PR1001-HSR-1000	Hot Start Taq 2X Red Dye Master Mix, 200 reactions (20 x 1.25mL)

High Fidelity Polymerase

- Two-tube formulation: High Fidelity DNA Polymerase & 5X buffer
- 50X the fidelity of wild-type Taq Polymerase
- Exhibits 3'->5' proofreading activity
- High performance with gDNA & GC- & AT-rich sequences
- Ideal for cloning (blunt end), mutagenesis, & microarray applications

Each 200 unit kit includes:

- 1 tube of High Fidelity Polymerase (2 U/µL)
- 3 tubes of 5X buffer (PCR enhancers, 5mM dNTPs, & 15mm $MgCl_2$)

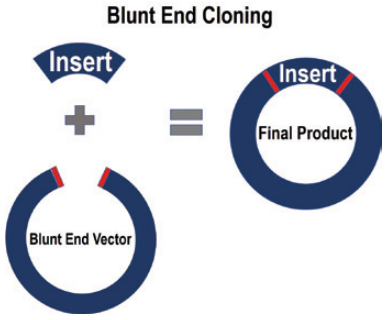
Cat No.	Description
PR1000-HF-200	High Fidelity DNA Polymerase, 200 units
PR1000-HF-1000	High Fidelity DNA Polymerase, 1000 units



PR1000-HF-200

Applications:

- Blunt End Cloning
- Colony PCR
- Fast PCR
- GC- & AT-Rich DNA Amplification
- Low Copy PCR



Blunt End Cloning
(PR1000-HF, PR1001-HF)

High Fidelity 2X Master Mix

- Single-tube formulation: Ready to use 2X Master Mix.
- Ideal for blunt end cloning
- 100X the fidelity of wild-type Taq
- High Fidelity Hot-Start Master Mix available for TA cloning (10X fidelity of wild-type Taq)
- Exhibits 3'->5' proofreading activity

Each mix includes:

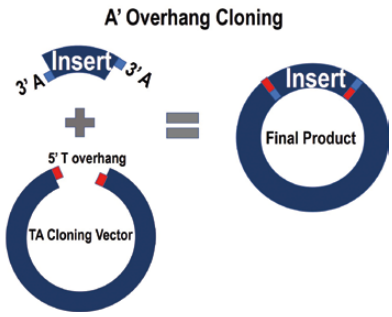
- High Fidelity Polymerase
- Buffer [PCR Enhancers, 2mM dNTPs, 6mM $MgCl_2$, hot-start antibodies(optional)]

Applications:

- Blunt End / TA Cloning
- Colony PCR
- Fast PCR
- GC- & AT-Rich DNA Amplification
- Low Copy PCR



PR1001-HFHS-200

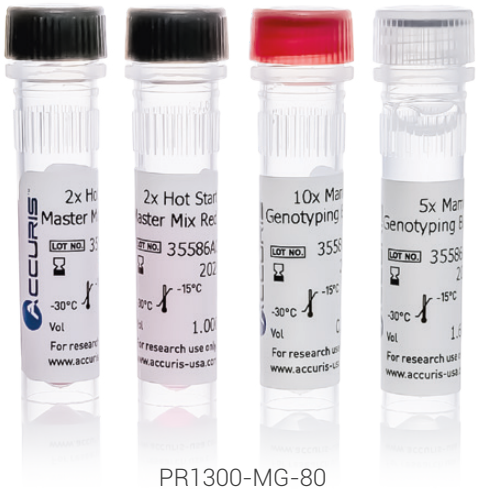


TA Cloning
(PR1001-HFHS)

Cat No.	Description
PR1001-HF-200	High Fidelity Master Mix, 200 reactions (2 x 1.25mL)
PR1001-HF-500	High Fidelity Master Mix, 500 reactions (5 x 1.25mL)
PR1001-HFHS-200	High Fidelity Hot Start Master Mix, 200 reactions (2 x 1.25mL)
PR1001-HFHS-500	High Fidelity Hot Start Master Mix, 500 reactions (5 x 1.25mL)

1 Hour Mammalian Genotyping Kit

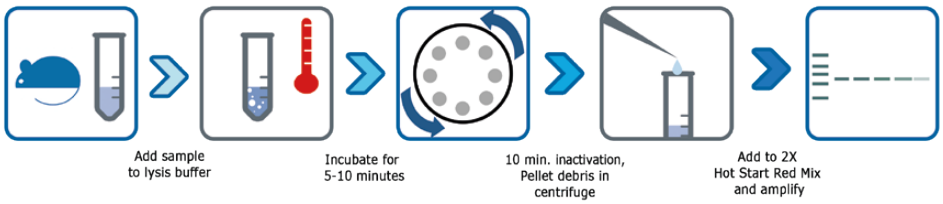
- Three-tube formulation: Lysis buffer, Protease buffer, & Hot Start Taq Red Dye Master Mix
- DNA extraction & amplification in as little as 1 hour
- Designed for use with tail snips, ear punches, blood, FFPE tissue sections, buccal swabs, hair, & solid animal tissues
- Included Hot Start Taq Red Dye Master Mix for reaction set-up at room temperature & direct gel loading



PR1300-MG-80

Each 80 reaction kit includes:

- 1 tube of 5X Lysis Buffer
- 1 tube of 10X Protease Buffer
- 2 tubes of Hot Start Taq 2X Red Dye Master Mix



Applications:

- DNA Extraction & Amplification from mammalian tissue, blood buccal swabs, & hair

Cat No.	Description
PR1300-MG-80	1 Hour Mammalian Genotyping Kit, 80 reactions
PR1300-MG-400	1 Hour Mammalian Genotyping Kit, 400 reactions

dNTP Sets & Mixes

- Supplied as a ready-to-use 40mM mix or as a set of 4 individual solutions of 100mM.
- Free of impurities and inhibitors that reduce sensitivity and yield
- Free of DNase, RNase, Nickase, & Protease activity (>99% pure, purified by HPLC)
- 24 month shelf life



PR3101-S-1

Each 0.5mL mix includes:

- 1 tube of 40mM dNTP Mix

Each 4 x 250µL set includes:

- 1 tube of 100mM dATP
- 1 tube of 100mM dCTP
- 1 tube of 100mM dGTP
- 1 tube of 100mM dTTP

Cat No.	Description
PR3040-M-1	40mM dNTP Mix (10mM/20µmol each), 0.5mL
PR3040-M-4	40mM dNTP Mix (10mM/80µm each), 2mL
PR3101-S-1	100mM dNTP Set, dATP, dGTP, dTTP, dCTP, 250µL /25µmol of each dNTP
PR3101-S-4	100mM dNTP Set, dATP, dGTP, dTTP, dCTP, 1mL/100µmol of each dNTP

Applications:

- End-Point PCR
- Real-Time PCR
- cDNA Synthesis

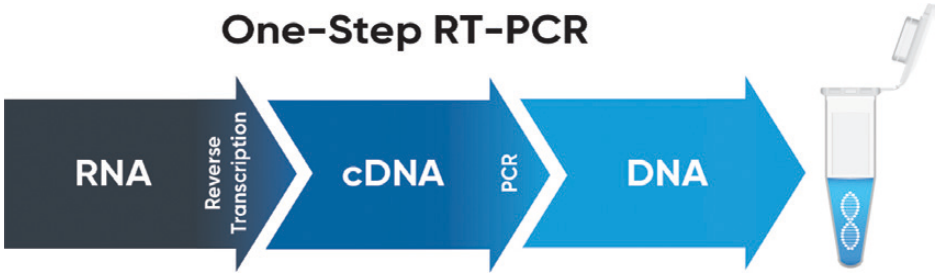
- Starting Material: **RNA**
- Two-tube formulation: 2X One-Step Mix & 20X RTase Blend
- Convenient cDNA synthesis and subsequent PCR in a single tube
- Sensitive: Optimized chemistry for detection of low copy transcripts
- Ideal for multiplex PCR & gene expression analysis
- Hot Start Taq Polymerase included to prevent nonspecific amplification and allow sample preparation at room temperature



PR1100-50

Each 50 reaction kit includes:

- 1 tube of 20X thermostable RTase (RNase inhibitor included)
- 1 tube of 2X One-Step Mix (PCR enhancers, 2mM dNTPs, & 6mm $MgCl_2$)



Applications:

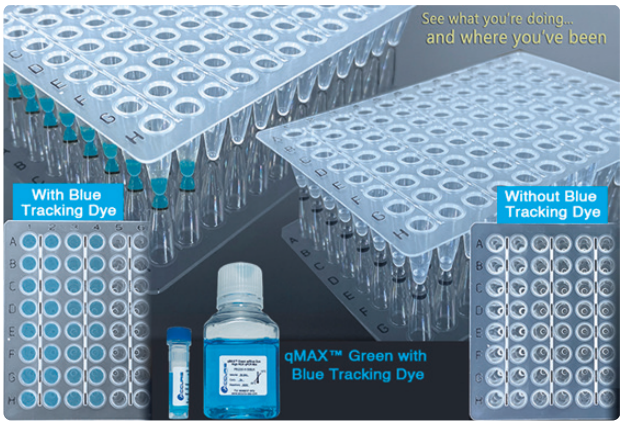
- Multiplex RT-PCR
- Gene Expression Analysis

Cat No.	Description
PR1100-50	One-Step RT-PCR Kit, 50 reactions
PR1100-100	One-Step RT-PCR Kit, 100 reactions



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qMAX™ Green qPCR Mix



- Single-tube formulation: Ready to use 2X Master Mix (Includes Hot Start Taq DNA Polymerase)
- Proprietary intercalating green fluorescent dye for minimal PCR inhibition & optimal fluorescence
- Inert blue tracking dye to assist in visualization during pipetting
- Early Ct values and detection across a broad dynamic range

Each mix includes:

- Accuris Hot Start Taq DNA Polymerase
- qMAX Green (proprietarty fluorescent dye)
- Inert blue tracking dye
- dNTPs
- Optimized buffer for maximum efficiency & sensitivity

Applications:

- Gene Expression Analysis
- Fluorescent Detection of DNA/cDNA



PR2000-N-100

Cat No.	Description
PR2000-N*-100	qMAX™ Green qPCR mix with blue tracking dye, No ROX, 100 reactions (1 x 1.0mL)
PR2000-N*-500	qMAX™ Green qPCR mix with blue tracking dye, No ROX, 500 reactions (5 x 1.0mL)
PR2000-N*-1000	qMAX™ Green qPCR mix with blue tracking dye, No ROX, 1000 reactions (10 x 1.0mL)

* To specify ROX levels when ordering: Use -N for No ROX, -L for Low ROX, & -H for High ROX
Bulk packaging available upon request

qMAX™ Probe qPCR Mix

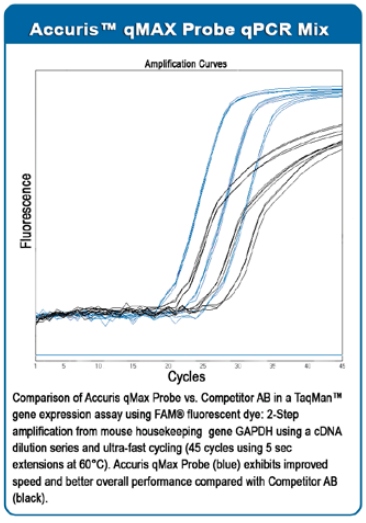
- Single-tube formulation: Ready to use 2X Master Mix (Includes Hot Start Taq DNA Polymerase)
- Compatible with popular hydrolysis & beacon probes
- Ideal for cDNA, gDNA, & low-copy number templates
- Compatible with standard/fast cycling protocols.

Each mix includes:

- Accuris Hot Start Taq DNA Polymerase
- dNTPs
- Optimized buffer for maximum efficiency & sensitivity



PR2001-N-100



Cat No.	Description
PR2001-N*-100	qMAX™ Probe qPCR Mix, No ROX, 100 reactions (1 x 1.0mL)
PR2001-N*-500	qMAX™ Probe qPCR Mix, No ROX, 500 reactions (5 x 1.0mL)
PR2001-N*-1000	qMAX™ Probe qPCR Mix, No ROX, 1000 reactions (10 x 1.0mL)

* To specify ROX levels when ordering: Use -N for No ROX, -L for Low ROX, & -H for High ROX
Bulk packaging available upon request

Applications:

- Multiplex RT-qPCR
- Probe-based detection of DNA/cDNA
- Gene Expression Analysis

Probe One-Step RT-qPCR Kit


PR2121-N-100

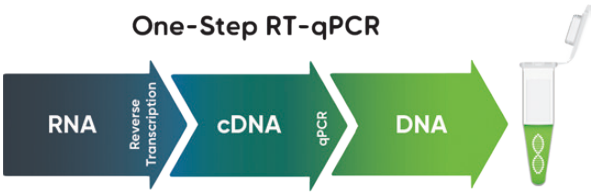
- Starting Material: **RNA**
- Two-tube formulation: 2X Probe One-Step Mix & 20X RTase Blend (Includes Hot Start Taq Polymerase)
- Convenient cDNA synthesis and subsequent qPCR in a single tube
- Ideal for gene expression analysis & **single** pathogen detection

Each 100 reaction kit includes:

- 1 tube of 20X thermostable MMLV derived RTase (RNase inhibitor included)
- 1 tube of 2X Probe One-Step Mix
  - Includes Accuris Hot Start Taq DNA Polymerase
  - dNTPs
  - Optimized buffer for maximum efficiency & sensitivity

Applications:

- Single Pathogen Detection
- Gene Expression Analysis



Probe One-Step Multiplex RT-qPCR Kit


PR2122-N-100

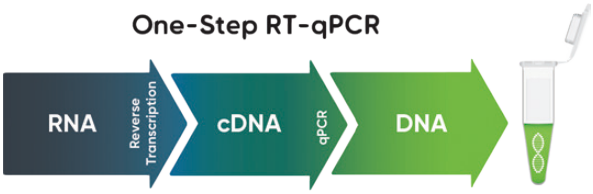
- Starting Material: **RNA**
- Two-tube formulation: 2X Probe One-Step Mix & 20X RTase Blend (Includes Hot Start Taq Polymerase)
- Convenient cDNA synthesis and subsequent qPCR in a single tube
- Ideal for gene expression analysis & **multiple** pathogen detection

Each 100 reaction kit includes:

- 1 tube of 20X thermostable MMLV derived RTase (RNase inhibitor included)
- 1 tube of 2X Probe One-Step Mix
  - Includes Accuris Hot Start Taq DNA Polymerase
  - dNTPs
  - Optimized buffer for maximum efficiency & sensitivity

Applications:

- Multiplex RT-qPCR
- Gene Expression Analysis



Cat No.	Description
PR2121-N*-100/500/1000	qMAX™ Probe One-Step RT-qPCR Kit, No ROX 100/500/1000 reactions
PR2122-N*-100/500/1000	qMAX™ Probe One-Step Multiplex RT-qPCR Kit, No ROX 100/500/1000 reactions

* To specify ROX levels when ordering: Use -N for No ROX, -L for Low ROX, & -H for High ROX
Bulk packaging available upon request

qMAX™ Green One-Step RT-qPCR Kit

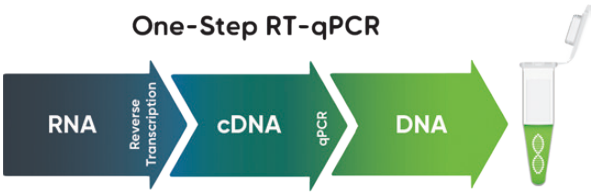


PR2120-N-100

- Starting Material: **RNA**
- Two-tube formulation: 2X Green One-Step Mix & 20X RTase Blend (Includes Hot Start Taq Polymerase)
- Proprietary intercalating green fluorescent dye for minimal PCR inhibition & optimal fluorescence
- Earlier Ct values and detection across a broad dynamic range
- Ideal for cDNA, gDNA, & low-copy number templates

Each 100 reaction kit includes:

- 1 tube of 20X thermostable MMLV derived RTase (RNase inhibitor included)
- 1 tube of 2X Green One-Step Mix
  - Includes Accuris Hot Start Taq DNA Polymerase
  - qMAX Green (proprietarty fluorescent dye)
  - dNTPs
  - Optimized buffer for maximum efficiency & sensitivity



Applications:

- Gene Expression Analysis
- Fluorescent Detection of DNA/cDNA

Cat No.	Description
PR2120-N*-100	qMAX™ Green One-Step RT-qPCR Kit, 100 reactions
PR2120-N*-500	qMAX™ Green One-Step RT-qPCR Kit, 500 reactions
PR2120-N*-1000	qMAX™ Green One-Step RT-qPCR Kit, 1000 reactions

* To specify ROX levels when ordering: Use -N for No ROX, -L for Low ROX, & -H for High ROX
Bulk packaging available upon request



cDNA Synthesis Kit

- Starting Material: **RNA**
- Two-tube formulation: 20X RTase & 5X Buffer
- Ideal for 4pg - 0.5µg of input RNA



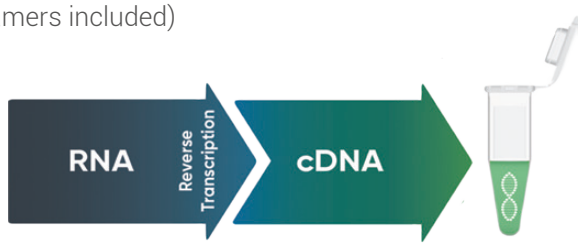
PR2100-C-25

Each 25 reaction kit includes:

- 1 tube of 20X RTase (10 U/µL; potent RNase inhibitor included)
- 1 tube of 5X buffer (oligo dT primers & random hexamers included)

Applications:

- cDNA Library Generation
- Microarrays
- Gene Expression Analysis
- 2-Step RT-PCR/RT-qPCR



First Strand cDNA Synthesis Flex Kit

- Starting Material: **RNA**
- Four-tube formulation for greater flexibility in assay design
- Ideal for 10pg - 2.0µg of input RNA



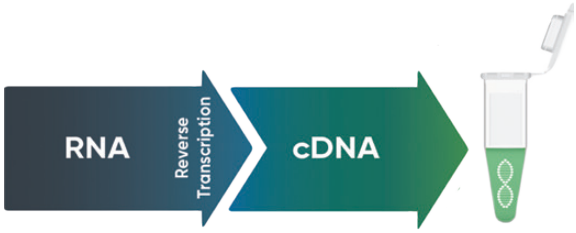
PR2110-50

Each 50 reaction kit includes:

- 1 tube of RTase (200 U/µL; Potent RNase inhibitor included)
- 1 tube of 5X buffer (5mM dNTPs, 15mM$MgCl_2$, stabilizers, & enhancers)
- 1 tube of random hexaprimers
- 1 tube of oligo dT primers

Applications:

- cDNA Library Generation
- Microarrays
- Gene Expression Analysis
- 2-Step RT-PCR/RT-qPCR



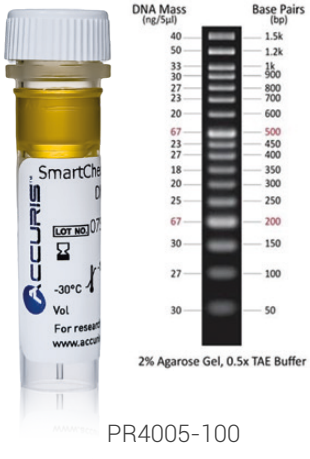
Cat No.	Description
PR2100-C-25/100/250	qMAX™ cDNA Synthesis Kit, 25/100/250 reactions
PR2110-50/200	qMAX™ First Strand cDNA Synthesis Flex Kit, 50/200 reactions

SmartCheck™ DNA Ladders

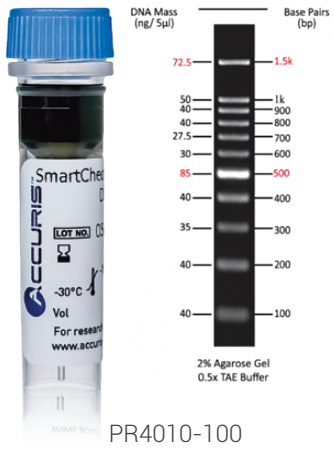
- Ready to use formulation: includes loading buffer & tracking dye
- Three ranges: 50bp, 100bp, & 1kb
- Purified by multistep chromatography to produce clear, distinct bands with increased intensity for easy size determination

Each 100 lane kit includes:

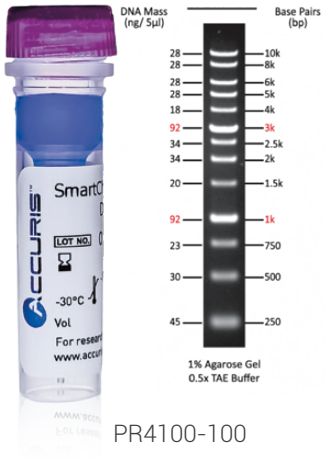
- 1 x 500µL tube of SmartCheck DNA Ladder (0.1mg/mL) supplied in buffer



PR4005-100



PR4010-100



PR4100-100

Cat No.	Description
PR4005-100/500	SmartCheck™ 50bp DNA Ladder, 100/500 lanes
PR4010-100/500	SmartCheck™ 100bp DNA Ladder, 100/500 lanes
PR4100-100/500	SmartCheck™ 1kb DNA Ladder, 100/500 lanes

SmartGlow™ DNA Stains

- Non-mutagenic, environmentally safe
- Excitation by UV (290nm) or blue light (490nm)
- Two types available: PS (Pre-Stain) & LD (Loading Dye)
- Emits green fluorescence when bound to ssDNA, dsDNA, & RNA

Each Pre-Stain tube

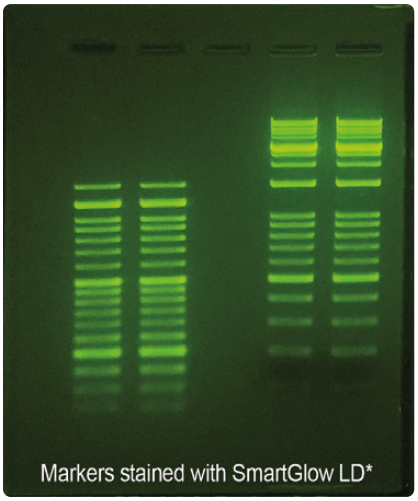
- 1 tube of 20,000X DNA Pre-Stain

Each Loading Dye tube

- 1 tube of 6X DNA Loading Dye



E4500-PS E4500-LD



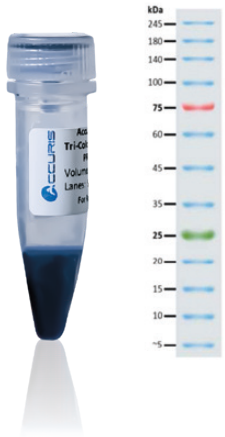
Cat No.	Description
E4500-PS	SmartGlow™ Pre-Stain 1.0mL (20,000X)
E4500-LD	SmartGlow™ Loading Dye, 1.0mL (6X)

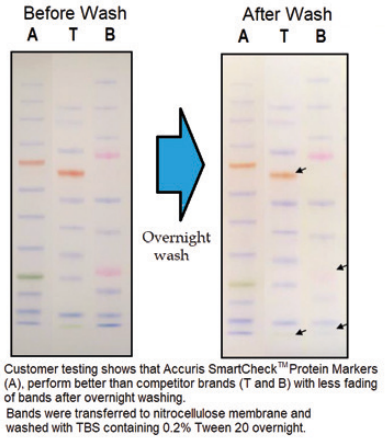
SmartCheck™ Tri-Color Protein Markers

- Ready to use formulation
- 13 pre-stained protein standards
- Molecular weight range: 5 - 245 kDa
- Recommended load volume: 5µL / well

Each kit includes:

- 2 x 250µL of Tri-Color Protein Marker (0.1-0.4 mg/mL) in buffer (20mM Tris-Phosphate, 2% SDS, 0.2mM Dithiothreitol, 3.6M Urea, & 15% Glycerol)





Customer testing shows that Accuris SmartCheck™ Protein Markers (A), perform better than competitor brands (T and B) with less fading of bands after overnight washing.
Bands were transferred to nitrocellulose membrane and washed with TBS containing 0.2% Tween 20 overnight.

Cat No.	Description
PR5013-TC	SmartCheck™ Tri-color Protein Marker, 13 bands 5-245 kDA



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ALSO AVAILABLE FROM ACCURIS INSTRUMENTS

AutoMATE™ 96
Microplate Pipetting Workstation



isoPURE™
Magnetic Purification System



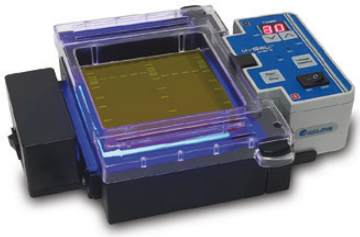
MYVOLT™ TOUCH



SmartDrop™

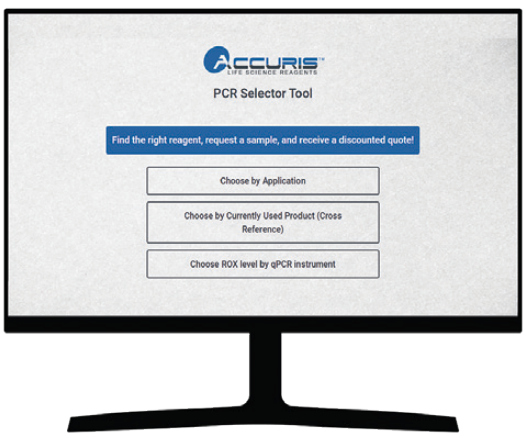


MYGEL™ InstaView



Explore our intuitive PCR Selector Tool to quickly find PCR enzymes based on application or cross reference.

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