



LIFE SCIENCE REAGENTS CATALOG

POLYMERASES, MASTER MIXES, & DNA LADDERS

Accuris™ Life Science Reagents is a division of Benchmark Scientific



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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

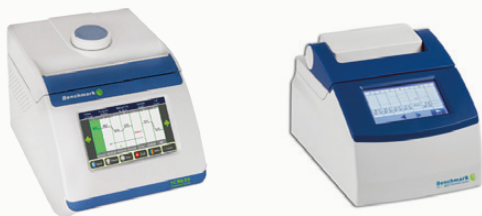
SmartDrop™
Nano Spectrophotometers



isoPURE™
Automated Purification Systems



BENCHMARK THERMAL CYCLERS



WE'RE ALWAYS THINKING...
ABOUT SCIENCE



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

Visit
our PCR Selector Tool

to get started.

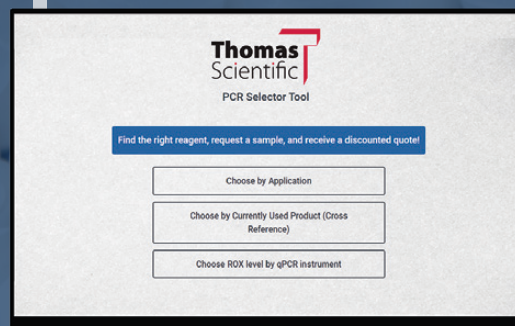






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Taq DNA Polymerase

- 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

Each 500 unit kit includes:

- 1 tube of Taq DNA Polymerase (5 U/μL)
- 4 tubes of 5X buffer (PCR enhancers & 15mm MgCl₂)



Applications:

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

Cat No.	Description
C838Q27	Taq DNA Polymerase, 500 units
C838Q28	Taq DNA Polymerase, 1000 units
C838Q29	Taq DNA Polymerase, 6000 units

dNTPs not included but available separately (see page 7)

Taq 2X Master Mix

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

Each mix includes:

- Taq DNA Polymerase
- Buffer [PCR Enhancers, 2mM dNTPs, 6mM MgCl₂, inert red gel loading dye for direct gel loading (optional)]

Applications:

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



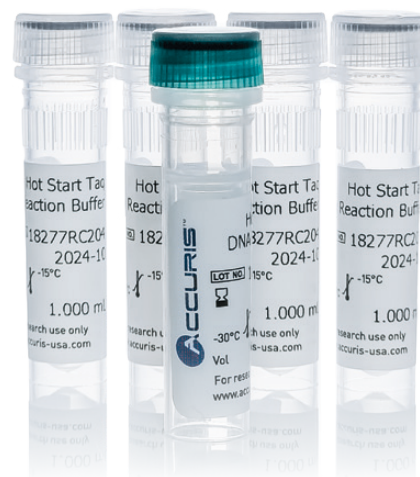
Cat No.	Description
C838Q45	Taq 2X Master Mix, 200 reactions (4 x 1.25mL)
C838Q46	Taq 2X Master Mix, 1000 reactions (20 x 1.25mL)
C838Q54	Taq 2X Red Dye Master Mix, 200 reactions (4 x 1.25mL)
C838Q55	Taq 2X Red Dye Master Mix, 1000 reactions (20 x 1.25mL)

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

Each 500 unit kit includes:

- 1 tube of Hot Start Taq DNA Polymerase (5 U/ μ L)
- 4 tubes of 5X buffer (PCR enhancers & 15mM MgCl₂)



C838Q38

Applications:

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

Cat No.	Description
C838Q38	Hot Start Taq DNA Polymerase, 500 units
C838Q39	Hot Start Taq DNA Polymerase, 1000 units
C838Q40	Hot Start Taq DNA Polymerase, 6000 units

dNTPs not included but available separately (see page 7)

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

Each mix includes:

- Taq DNA Polymerase
- Buffer (PCR Enhancers, 2mM dNTPs, 6mM MgCl₂, inert red gel loading dye for direct gel loading (optional))

Applications:

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



C838Q48

Cat No.	Description
C838Q48	Hot Start Taq 2X Master Mix, 200 reactions (4 x 1.25mL)
C838Q49	Hot Start Taq 2X Master Mix, 1000 reactions (20 x 1.25mL)
C838Q51	Hot Start Taq 2X Red Dye Master Mix, 200 reactions (4 x 1.25mL)
C838Q52	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 MgCl₂)

Cat No.	Description
C838Q35	High Fidelity DNA Polymerase, 200 units
C838Q36	High Fidelity DNA Polymerase, 1000 units

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 MgCl₂, hot-start antibodies(optional)]

Applications:

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

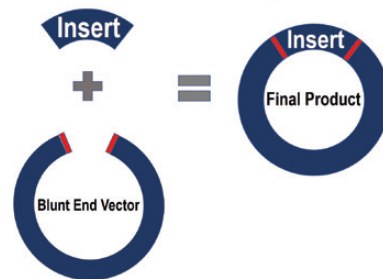


C838Q35

Applications:

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

Blunt End Cloning

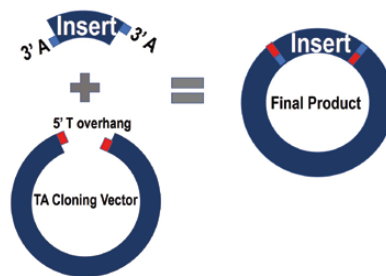


Blunt End Cloning
(C838Q35, CHM00C933)



CHM00C936

A' Overhang Cloning



TA Cloning
(CHM00C936)

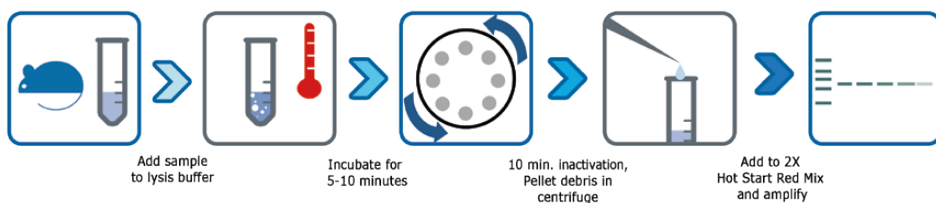
Cat No.	Description
CHM00C933	High Fidelity Master Mix, 200 reactions (2 x 1.25mL)
CHM00C934	High Fidelity Master Mix, 500 reactions (5 x 1.25mL)
CHM00C936	High Fidelity Hot Start Master Mix, 200 reactions (2 x 1.25mL)
CHM00C937	High Fidelity Hot Start Master Mix, 500 reactions (5 x 1.25mL)

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

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



C838Q60

Applications:

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

Cat No.	Description
C838Q60	1 Hour Mammalian Genotyping Kit, 80 reactions
C838Q61	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

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



CHM03Z654

Cat No.	Description
CHM03Z652	40mM dNTP Mix (10mM/20µmol each), 0.5mL
CHM03Z653	40mM dNTP Mix (10mM/80µmol each), 2mL
CHM03Z654	100mM dNTP Set, dATP, dGTP, dTTP, dCTP, 250µL /25µmol of each dNTP
CHM03Z655	100mM dNTP Set, dATP, dGTP, dTTP, dCTP, 1mL/100µmol of each dNTP

Applications:

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

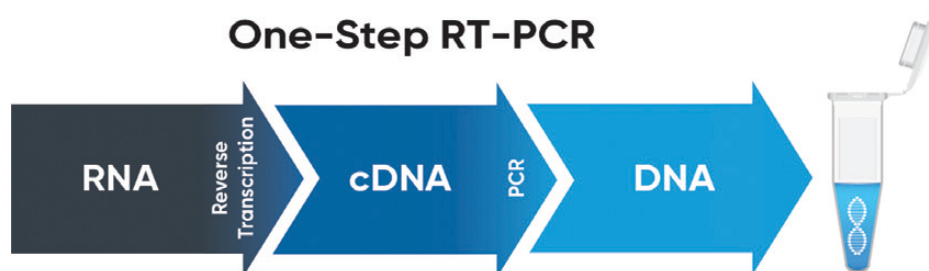
- Starting Material: **RNA**
- Two-tube formulation: 2X One-Step Mix & 20X RTase Blend
- Convenient cDNA synthesis and subsequent PCR in a single tube
- Sensitive: Optimized chemistry for detection of low copy transcripts
- Ideal for multiplex PCR & gene expression analysis
- Hot Start Taq Polymerase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



CHM03Z656

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 MgCl₂)



Applications:

- Multiplex RT-PCR
- Gene Expression Analysis

Cat No.	Description
CHM03Z656	One-Step RT-PCR Kit, 50 reactions
CHM03Z657	One-Step RT-PCR Kit, 100 reactions



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qMAX™ Green qPCR Mix

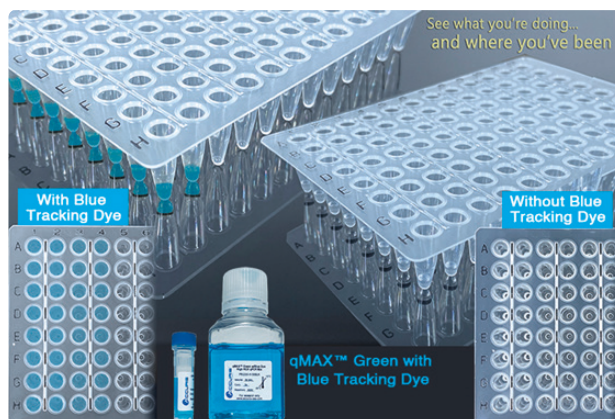
- Single-tube formulation: Ready to use 2X Master Mix (Includes Hot Start Taq DNA Polymerase)
- Proprietary intercalating green fluorescent dye for minimal PCR inhibition & optimal fluorescence
- Inert blue tracking dye to assist in visualization during pipetting
- Early Ct values and detection across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

Each mix includes:

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

Cat No.	Description
CHM03W200	qMAX™ Green qPCR mix with blue tracking dye, No ROX, 100 reactions (1 x 1.0mL)
CHM03W201	qMAX™ Green qPCR mix with blue tracking dye, No ROX, 500 reactions (5 x 1.0mL)
CHM03W202	qMAX™ Green qPCR mix with blue tracking dye, No ROX, 1000 reactions (10 x 1.0mL)

* Available in No ROX, Low ROX, & High ROX formulations
Bulk packaging available upon request



Applications:

- Gene Expression Analysis
- Fluorescent Detection of DNA/cDNA



CHM03W200

REAL TIME PCR



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:

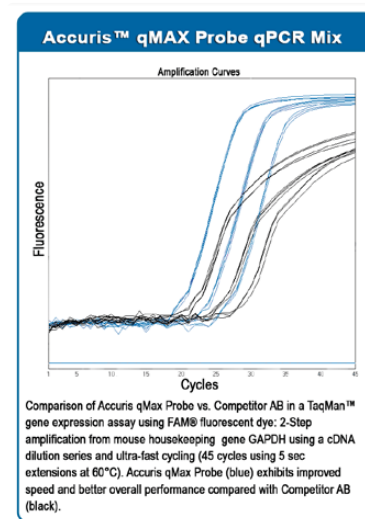
- Accuris Hot Start Taq DNA Polymerase
- dNTPs
- Optimized buffer for maximum efficiency & sensitivity

Cat No.	Description
C838Q80	qMAX™ Probe qPCR Mix, No ROX, 100 reactions (1 x 1.0mL)
C838Q81	qMAX™ Probe qPCR Mix, No ROX, 500 reactions (5 x 1.0mL)
C838Q82	qMAX™ Probe qPCR Mix, No ROX, 1000 reactions (10 x 1.0mL)

* Available in No ROX, Low ROX, & High ROX formulations
Bulk packaging available upon request



C838Q80



Applications:

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



■ Probe One-Step RT-qPCR Kit

- 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:

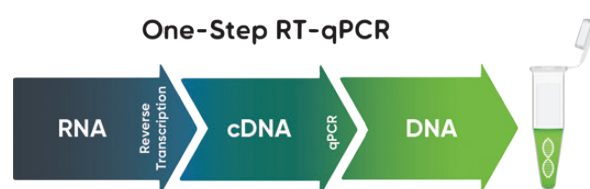
- 1 tube of 20X thermostable MMLV derived RTase (RNase inhibitor included)
- 1 tube of 2X Probe One-Step Mix
 - Includes Accuris Hot Start Taq DNA Polymerase
 - dNTPs
 - Optimized buffer for maximum efficiency & sensitivity

Applications:

- Single Pathogen Detection
- Gene Expression Analysis



CHM03Q126



■ Probe One-Step Multiplex RT-qPCR Kit

- 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:

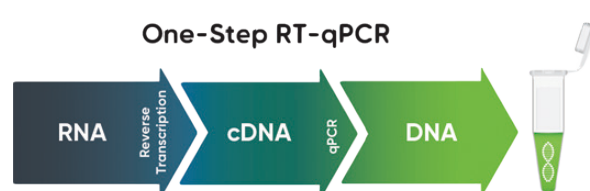
- 1 tube of 20X thermostable MMLV derived RTase (RNase inhibitor included)
- 1 tube of 2X Probe One-Step Mix
 - Includes Accuris Hot Start Taq DNA Polymerase
 - dNTPs
 - Optimized buffer for maximum efficiency & sensitivity

Applications:

- Multiplex RT-qPCR
- Gene Expression Analysis



CHM02D900



REAL TIME PCR

Cat No.	Description
CHM03Q126	qMAX™ Probe One-Step RT-qPCR Kit, No ROX 100 reactions
CHM02D900	qMAX™ Probe One-Step Multiplex RT-qPCR Kit, No ROX 100 reactions

* Available in No ROX, Low ROX, & High ROX formulations
Bulk packaging available upon request



- 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



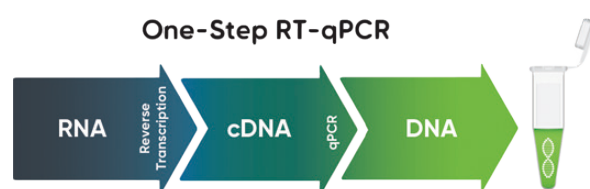
CHM03Z658

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 (proprietary fluorescent dye)
 - dNTPs
 - Optimized buffer for maximum efficiency & sensitivity

Applications:

- Gene Expression Analysis
- Fluorescent Detection of DNA/cDNA



REAL TIME PCR

Cat No.	Description
CHM03Z658	qMAX™ Green One-Step RT-qPCR Kit, 100 reactions
CHM03Z659	qMAX™ Green One-Step RT-qPCR Kit, 500 reactions
CHM03Z660	qMAX™ Green One-Step RT-qPCR Kit, 1000 reactions

* Available in No ROX, Low ROX, & High ROX formulations
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

Each 25 reaction kit includes:

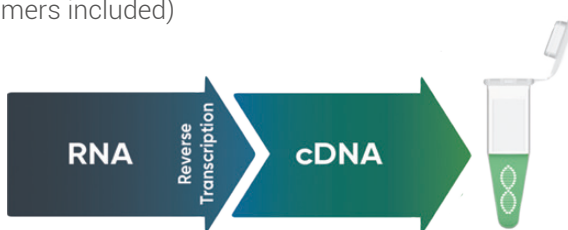
- 1 tube of 20X RTase (10 U/µL; potent RNase inhibitor included)
- 1 tube of 5X buffer (oligo dT primers & random hexamers included)

Applications:

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



C838Q84



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

Each 50 reaction kit includes:

- 1 tube of RTase (200 U/µL; Potent RNase inhibitor included)
- 1 tube of 5X buffer (5mM dNTPs, 15mMgCl₂, 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



PR2110-50



Cat No.	Description
C838Q84	qMAX™ cDNA Synthesis Kit, 25 reactions
CHM03Z661	qMAX™ First Strand cDNA Synthesis Flex Kit, 50 reactions

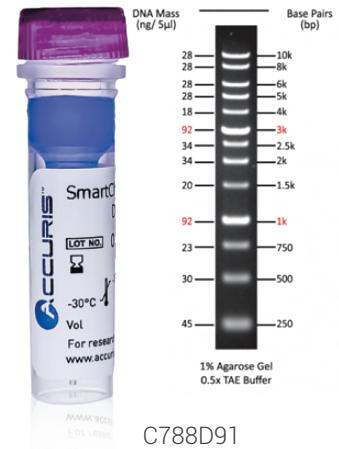
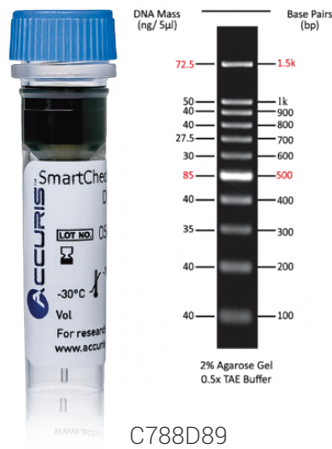
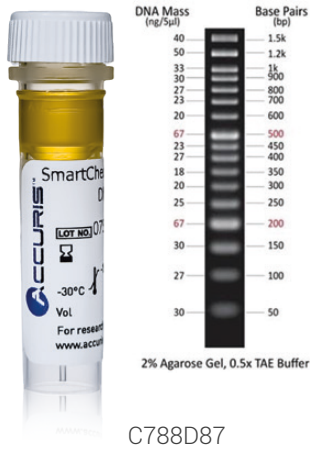


SmartCheck™ DNA Ladders

- 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



Cat No.	Description
C788D87	SmartCheck™ 50bp DNA Ladder, 100 lanes
C788D89	SmartCheck™ 100bp DNA Ladder, 100 lanes
C788D91	SmartCheck™ 1kb DNA Ladder, 100 lanes



SmartGlow™ DNA Stains

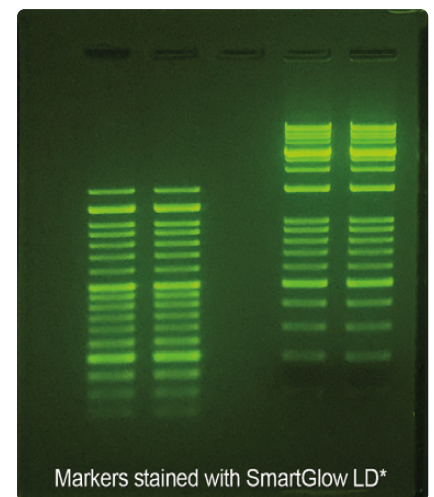
- Non-mutagenic, environmentally safe
- Excitation by UV (290nm) or blue light (490nm)
- Two types available: PS (Pre-Stain) & LD (Loading Dye)
- Emits green fluorescence when bound to ssDNA, dsDNA, & RNA

Each Pre-Stain tube

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

Each Loading Dye tube

- 1 tube of 6X DNA Loading Dye



Cat No.	Description
C859Y49	SmartGlow™ Pre-Stain 1.0mL (20,000X)
C859Y50	SmartGlow™ Loading Dye, 1.0mL (6X)

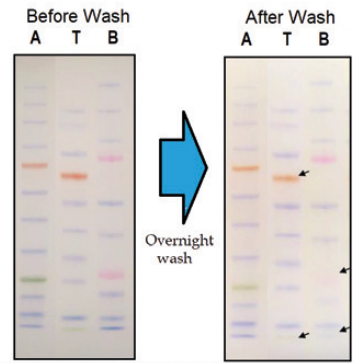
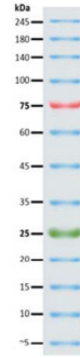


SmartCheck™ Tri-Color Protein Markers

- 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
CHM01Q045	SmartCheck™ Tri-color Protein Marker, 13 bands 5-245 kDa

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CONTINUOUS IMPROVEMENT

ALSO AVAILABLE FROM ACCURIS INSTRUMENTS

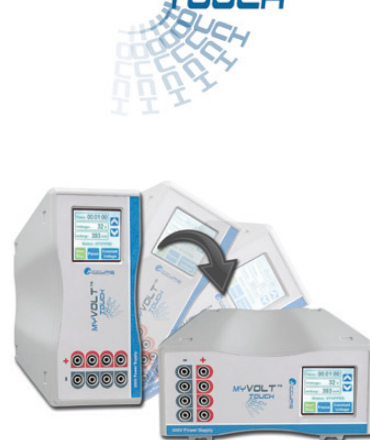
AutoMATE™ 96
Microplate Pipetting Workstation



isoPURE™
Magnetic Purification System



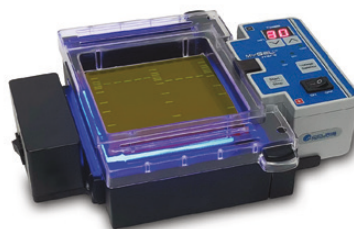
MYVOLT™ TOUCH



SmartDrop™

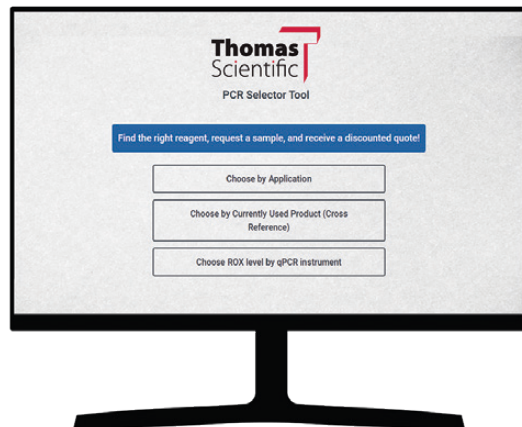


MY GEL™ InstaView



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

Visit pcrselector.accuris-usa.com/?cid=Thomas_Scientific to get started.



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