

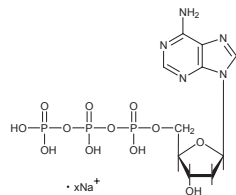
DEOXYNUCLEOTIDES

2'-Deoxyadenosine 5'-triphosphate sodium salt

(dATP)

Purity: $\geq 99\%$

DNase, RNase: none detected



Storage: $-20\text{ }^{\circ}\text{C}$

Shipped in dry ice

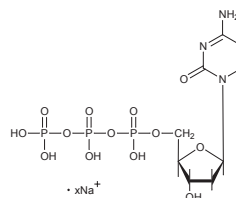
| Product | Product Description | Quantity |
|------------------------|---------------------|----------------------------------|
| D 4788 | 100 mM (pH 7.0) | 25 μmole 0.1 mmole |
| D 6920 | 10 mM | 0.5 ml |

2'-Deoxycytidine 5'-triphosphate sodium salt

(dCTP)

Purity: $\geq 99\%$

DNase, RNase: none detected



Storage: $-20\text{ }^{\circ}\text{C}$

Shipped in dry ice

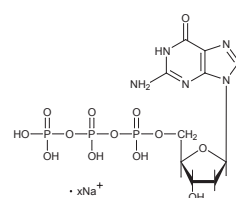
| Product | Product Description | Quantity |
|------------------------|---------------------|----------------------------------|
| D 4913 | 100 mM (pH 7.5) | 25 μmole 0.1 mmole |
| D 7045 | 10 mM | 0.5 ml |

2'-Deoxyguanosine 5'-triphosphate sodium salt

(dGTP)

Purity: $\geq 99\%$

DNase, RNase: none detected



Storage: $-20\text{ }^{\circ}\text{C}$

Shipped in dry ice

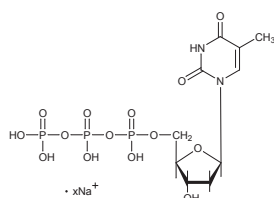
| Product | Product Description | Quantity |
|------------------------|---------------------|----------------------------------|
| D 5038 | 100 mM (pH 7.0) | 25 μmole 0.1 mmole |
| D 7170 | 10 mM | 0.5 ml |

Thymidine 5'-triphosphate sodium salt

(TTP; dTTP)

Purity: $\geq 99\%$

DNase, RNase: none detected



Storage: $-20\text{ }^{\circ}\text{C}$

Shipped in dry ice

| Product | Product Description | Quantity |
|------------------------|---------------------|----------------------------------|
| T 9656 | 100 mM (pH 7.0) | 25 μmole 0.1 mmole |
| T 7791 | 10 mM (pH 7.0) | 0.5 ml |

Order: 1.800.325.3010 Technical Service: 1.800.325.5832

Related PCR Reagents
and Accessories

SIGMA

DEOXYNUCLEOTIDES

Deoxynucleotide Set

Deoxynucleotide sets contain either 100 mM or 10 mM solutions of all four nucleotides (dATP, dCTP, dGTP and TTP).

Purity: $\geq 99\%$

DNase, RNase: none detected

Storage: $-20\text{ }^{\circ}\text{C}$

Shipped in dry ice

| Product | Product Description | Quantity |
|---------------------------|---|----------|
| DNTP-10 | 0.5 ml each of 10 mM dATP, dCTP, dGTP and TTP | 1 kit |
| DNTP-100 | 0.25 ml each of 100 mM dATP, dCTP, dGTP and TTP | 1 kit |
| DNTP-100A | 1.0 ml each of 100 mM dATP, dCTP, dGTP and TTP | 1 kit |

Deoxynucleotide Mix, 10 mM

Deoxynucleotide Mix is a convenient premixed dNTP solution containing 10 mM each of UltraPure dATP, dCTP, dGTP and TTP. One μl is sufficient for a standard 50 μl PCR reaction.

Suitable for routine and long PCR, manual and automated DNA sequencing, cDNA synthesis and labeling reactions.

Features and Benefits

- Purity of each dNTP: Minimum 99%
- Conveniently formulated; 1 μl is used per 50 μl PCR
- Equimolar amounts of each dNTP means less pipetting
- Minimize risk of contamination in PCR
- UltraPure dNTPs can help maximize consistency and yields in critical PCR reactions

Storage: $-20\text{ }^{\circ}\text{C}$

Shipped in dry ice

DNase, RNase: none detected

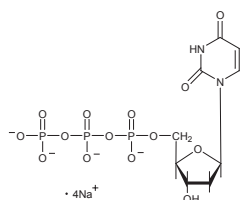
| Product | Product Description | Quantity |
|------------------------|----------------------------|---------------------------------|
| D 7295 | Deoxynucleotide Mix, 10 mM | 0.2 ml 20 x 0.2 ml 0.5 ml |

2'-Deoxyuridine 5'-triphosphate sodium salt

100 mM in water

Used in conjunction with uracil DNA glycosylase to prevent carry-over contamination in PCR. The dUTP is substituted for TTP in the PCR reaction.

Purity: $\geq 99\%$



Storage: $-20\text{ }^{\circ}\text{C}$

Shipped in dry ice

References

1. Lindahl, T., et al., DNA N-glycosidases: properties of uracil-DNA glycosidase from *Escherichia coli*. *J. Biol. Chem.* **252**, 3286-3294 (1977).
2. Longo, M., et al., Use of uracil DNA glycosylase to control carry-over contamination in polymerase chain reactions *Gene* **93**, 125-128 (1990).

| Product | Product Description | Quantity |
|------------------------|--------------------------|---------------------|
| D 0184 | dUTP sodium salt, 100 mM | 25 μmole |

ACGU dNTP Mix

Contains the four dNTPs, dATP, dCTP, dGTP, and dUTP. This mix gives better contamination control for small amplicons (100-300 bp), up to 10^5 copies per reaction. Recommended for use with heat-labile UDG (standard UDG is not recommended for this mix). 50 \times concentrate

Storage: $-20\text{ }^{\circ}\text{C}$

Shipped in dry ice

| Product | Product Description | Quantity |
|------------------------|---------------------|----------|
| A 5593 | ACGU dNTP Mix | 0.5 ml |

ACGU+T dNTP Mix

Contains dATP, dCTP, dGTP, dUTP and a small amount of TTP. This mix is optimized for larger amplicons (>300 bp), up to 10^5 copies per reaction. Recommended for use with heat-labile UDG or standard UDG. 50 \times concentrate

Storage: $-20\text{ }^{\circ}\text{C}$

Shipped in dry ice

| Product | Product Description | Quantity |
|------------------------|---------------------|----------|
| A 5468 | ACGU+T dNTP Mix | 0.5 ml |

REAGENTS

Betaine solution

5 M, PCR Reagent

The addition of betaine at a final concentration of 0.8-1.6 M improves the amplification of DNA by reducing the formation of secondary structure in GC-rich regions.

DNase, RNase: none detected

Vial of 1.5 ml

The purchase of this product does not include a license to practice the claims of U.S. Patent No. 5,545,539, DE4411588, or DE4411594. The practice of the claims of these patents may require a license from the patent owners.

Storage: 2-8 °C

References

1. Rees, W.A., et al., Betaine can eliminate the base pair composition dependence of DNA melting *Biochemistry* **32**, 137-144 (1993).
2. Henke, W., et al., Betaine improves the PCR amplification of GC-rich DNA sequences. *Nucl. Acids Res.* **25**, 3957-3958 (1997).

| Product | Product Description | Quantity |
|------------------------|-----------------------|-------------------|
| B 0300 | Betaine solution, 5 M | 1 vial 5 vials |

10× PCR Buffer

Composition of the 10× buffer: 100 mM Tris-HCl, pH 8.3 at 25 °C; 500 mM KCl; 15 mM MgCl₂; 0.01% gelatin

Vial of 1.5 ml

Storage: -20-0 °C

R: 36/37/38 S: 26-36

| Product | Product Description | Quantity |
|------------------------|---------------------|-------------------|
| P 2192 | 10× PCR Buffer | 1 vial 5 vials |

PCR Buffer without MgCl₂

The PCR Buffer, diluted to 1×, provides the recommended pH and ionic strength. The MgCl₂ can be used to optimize the Mg²⁺ concentration for PCR with any template/primer set. Includes one vial (1.5 ml) each of 10× PCR Buffer II (without MgCl₂) and 25 mM MgCl₂ solution.

Composition of the 10× PCR Buffer II: 100 mM Tris-HCl, pH 8.3 at 25 °C; 500 mM KCl; 0.01% gelatin

Storage: -20-0 °C

R: 36/37/38 S: 26-28

| Product | Product Description | Quantity |
|------------------------|--------------------------------------|----------|
| PCR-II | PCR Buffer without MgCl ₂ | 1 kit |

Dimethyl sulfoxide

(Methyl sulfoxide; DMSO)

PCR Reagent

Dimethyl sulfoxide (1-10%) has been shown to accelerate strand renaturation and is believed to give the nucleic acid thermal stability against depurination. As a PCR cosolvent, DMSO may help improve yields, especially in long PCR. Supercools easily and remelts slowly at room temperature. Solidified product can be re-liquified by warming to room temperature without detriment to the product.

mp: 18 °C

Density: 1.1 g/ml

Vial of 1 ml

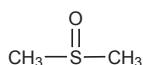
Storage: Room Temperature

R: 36/37/38 S: 23-26-36

References

1. Cheng, S., et al., *Proc. Natl. Acad. Sci. USA* **91**, 5695-5699 (1994).
2. Winship, P.R., et al., An improved method for directly sequencing PCR amplified material using dimethyl sulphoxide. *Nucl. Acids Res.* **17**, 1266 (1989).

| Product | Product Description | Quantity |
|------------------------|---------------------|-------------------|
| D 9170 | Dimethyl sulfoxide | 1 vial 5 vials |



REAGENTS

Glycerol

(1,2,3-Propanetriol; Glycerin)

PCR Reagent

The addition of glycerol is reported to improve the PCR process.

DNase, RNase: none detected
Vial of 1.5 ml

Storage: Room Temperature

Reference

1. Smith, D., et al., *Amplifications* **5**, 16 (1990).

| Product | Product Description | Quantity |
|------------------------|---------------------|-------------------|
| G 8778 | Glycerol | 1 vial 5 vials |

Magnesium chloride solution

PCR Reagent

Suitable for optimization of polymerase chain reactions
25 MgCl₂

DNase, RNase: none detected
Vial of 1.5 ml

Storage: 2-8 °C

| Product | Product Description | Quantity |
|------------------------|------------------------------------|---------------------------|
| M 8787 | Magnesium chloride solution, 25 mM | 1 vial 5 vials 5 ml |

Mineral oil

PCR Reagent

DNase, RNase, protease: none detected
Density: 0.84 g/ml
Vial of 1.5 ml

Storage: Room Temperature

| Product | Product Description | Quantity |
|------------------------|---------------------|-------------------|
| M 8662 | Mineral oil | 1 vial 5 vials |

Single-strand Binding Protein

from Escherichia coli

(SSB)

Binds with high specificity to single-stranded DNA. Can be useful in enhancing the specificity of PCR and in enabling the sequencing of problematic DNA templates.

1.5 mg/ml in 20 mM Tris-HCl, pH 8.0, 0.5 M NaCl, 0.1 mM EDTA, 0.1 mM DTT, 50% glycerol.
>95% (SDS-PAGE)

DNase, RNase: none detected

Storage: -20-0 °C

Shipped in wet ice

Reference

1. Schwarz, K., et al., Improved yields of long PCR products using gene 32 protein. *Nucl. Acids Res.* **18**, 1079 (1990).

| Product | Product Description | Quantity |
|------------------------|-------------------------------|------------------|
| S 3917 | Single-strand Binding Protein | 100 µg 500 µg |

Ribonuclease Inhibitor

from human placenta

Useful for *in vitro* inhibition of ribonucleases, including procedures like cDNA synthesis, RT-PCR, and *in vitro* transcription and translation.

Solution in 50% glycerol, 20 mM HEPES-KOH, pH 7.6, 50 mM KCl and 8 mM DTT

Concentration: 30,000-50,000 units per ml

Unit definition: One unit will reduce the activity of 5 ng of ribonuclease A by 50% in a cytidine 2':3'-cyclic monophosphate system.

Storage: -20 °C

Shipped in dry ice
S: 24/25

References

- Blackburn, P., *J. Biol. Chem.* **254**, 12484 (1979).
- Blackburn, P. Ribonuclease inhibitor from human placenta: interaction with derivatives of ribonuclease A *J. Biol. Chem.* **254**, 12488-12493 (1979).

| Product | Product Description | Quantity |
|------------------------|------------------------|---|
| R 2520 | Ribonuclease Inhibitor | 2,500 units 10,000 units 20,000 units |

REAGENTS

RNaseZAP

A cleaning agent for removing RNase from glassware, plastic surfaces, countertops, and pipettors. It is also effective at eliminating RNase contamination from microcentrifuge tubes without inhibiting subsequent enzymatic reactions.

Storage: Room Temperature

R: 10-36/37/38 S: 16-26-36/37/39

| Product | Product Description | Quantity |
|------------------------|---------------------|----------------------|
| R_2020 | RNaseZAP | 250 ml 6 x 250 ml |

Water

PCR Reagent

Suitable for polymerase chain reaction (PCR)

Sterile-filtered

DNase, RNase: none detected

Vial of 1.5 ml

Storage: Room Temperature

| Product | Product Description | Quantity |
|------------------------|---------------------|-------------------|
| W_1754 | Water | 1 vial 5 vials |

Uracil DNA Glycosylase

from *Escherichia coli*

(DNA Uracil Glycosylase; UDG; Uracil N-glycosylase)

Eliminates carryover contamination that can result in false positives in PCR reactions. UDG catalyzes the removal of uracil residues from both single- and double-stranded DNA, but not RNA. This reaction leaves the DNA sugar-phosphodiester backbone intact. The resulting DNA is not suitable for use as a hybridization target or as a template for DNA polymerases.

Supplied at 1 unit/μl in 30 mM Tris-HCl, pH 7.5, 1 mM DTT, 0.05% (w/v) Tween-20, 1 mM EDTA, 150 mM NaCl, 50% (v/v) glycerol.

Unit definition: One unit catalyzes the release of 1 nmol of free uracil from ³H-poly(dU) in 1 hr at 37 °C.

Concentration: 1 unit per μl

Storage: -20 °C

Shipped in dry ice

References

- Lindahl, T., et al., DNA N-glycosidases: properties of uracil-DNA glycosidase from *Escherichia coli*. *J. Biol. Chem.* **252**, 3286-3294 (1977).
- Longo, M., et al., Use of uracil DNA glycosylase to control carry-over contamination in polymerase chain reactions *Gene* **93**, 125-128 (1990).

| Product | Product Description | Quantity |
|------------------------|------------------------|-----------|
| U_1257 | Uracil DNA Glycosylase | 100 units |

Order: 1.800.325.3010 Technical Service: 1.800.325.5832

Related PCR Reagents
and Accessories

 SIGMA

ACCESSORIES

GeNunc Tubes for Amplification

Features and Benefits

- Optimized for liquid phase PCR
- GeNunc tubes and caps are made of virgin polypropylene which can withstand temperatures from -20 °C to +122 °C
- Available in 0.2 ml strips or as 0.2 ml and 0.5 ml individual tubes
- V-shaped tubes with uniformly thin walls
- Dome-shaped lids for good contact with heated lids of cycler
- Compatible with most 0.2 ml and 0.5 thermal cycler formats
- Offers uniform heat transmission for maximum yield
- Certified RNase and DNase free



| Product | Product Description | Quantity |
|------------------------|---|-----------------------------------|
| T_0322 | PCR Tube Strips, 0.2 ml with matching cap strip | 1 case (600 each) 120 each |
| T_0447 | PCR Tubes, 0.2 ml with attached caps | 1 case (10,000 each) 1000 each |
| T_0572 | PCR Tubes, 0.5 ml with attached caps | 1000 each |

GeNunc Tube Tray and Holder

Features and Benefits

- Standard 96 MicroWell format to hold 0.2 ml PCR tubes, strips or Nunc 96-well Amplification Plates
- Plate compatible with automated handling systems
- Removable tray can be fitted directly into the thermal cycler
- Compatible with V-bottom 0.2 ml tube block thermal cycler formats of major manufacturers
- Alphanumerically marked for sample identification
- Tray fits holder in only one way to make orientation easy
- Can be used as a storage system
- Stackable space saving units with lid lugs for stability during storage
- Chemically resistant to weak acids and alcohols

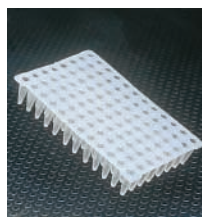


| Product | Product Description | Quantity |
|------------------------|----------------------|------------------|
| P_4366 | Tube Tray and Holder | 1 each 5 each |

PCR multiwell plates, 96-well

Virgin polypropylene, fully autoclavable, and certified DNase- and RNase-free. Wells have thin walls for rapid temperature equilibration and reduced cycle time.

A rigid top plate (included) minimizes plate distortion, assures a dependable fit with the thermal cycler, and allows for leak-proof seal with Micro-Mats or Cap Strips. Each well has a capacity of 200 µl.

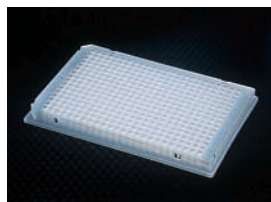


| Product | Product Description | Quantity |
|---------------------------|---|----------|
| Z37,490-3 | PCR multiwell plates, 96-well Pkg of 25 plates | 2 pkg |

ACCESSORIES

PCR multiwell plates, 384-well

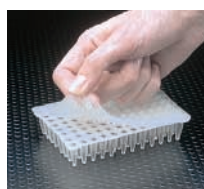
Plates are skirted for compatibility with automation systems. Wells have raised rims to ensure contact with sealing film and reduce evaporation. Each well has a capacity of 40 μ l and a working volume of 25 μ l.



| Product | Product Description | Quantity |
|---------------------------|--|----------|
| Z37,491-1 | PCR multiwell plates, 384-well Pkg of 50 plates | 1 pkg |

Micro mats for PCR plates

Molded to fit standard 96-well plates, these mats have 96 dimples on each side to facilitate placement and return condensate to reaction mixture. When used with a screw- or clip-down thermal cycler lid, provides 100% sealing. Fully autoclavable, reversible, reusable up to 50 times.



| Product | Product Description | Quantity |
|---------------------------|---------------------------|----------|
| Z37,493-8 | Micro mats for PCR plates | 5 each |

Sealing film for 96-well multiwell plates

Sheets are precut to fit standard multiwell plates; both film and adhesive are inert and compatible with microplate procedures. Adhesive forms a tight, waterproof seal, preventing cross-contamination and evaporation. ThermalSeal is polypropylene-based, pressure-resistant, and thermostable from -40 to $+125$ $^{\circ}$ C. Excellent for sensitive PCR applications, it is manufactured RNase- and DNase-free.



| Product | Product Description | Quantity |
|---------------------------|-------------------------------|----------|
| Z36,967-5 | ThermalSeal film, non-sterile | 100 each |
| Z36,968-3 | ThermalSeal film, sterile | 100 each |

PCR microtubes, PurePak

Reaching into a bulk bag of tubes can cause contamination; PurePak packaging solves this problem by dividing tubes into ten separate PurePaks. PurePaks can be opened as needed to protect unused tubes from contamination. Thin walled tubes are precision-molded with premium, non-wettable polypropylene and receive multi-point, quality inspections to ensure unsurpassed performance. Certified RNase-, DNase- and pyrogen-free. Clear, non-sterile.

| Product | Product Description | Quantity |
|------------------------|---|-----------------|
| P_3114 | Flat caps (thin wall) Size: 0.2 ml volume Case of 10 packs Pack of 1000 tubes | 1 pkg 1 case |
| P_3239 | Dome caps (thin wall) Size: 0.2 ml volume Case of 10 packs Pack of 1000 tubes | 1 pkg 1 case |
| P_3489 | 8 tube strips with strip caps (thin wall) Size: 0.2 ml volume Case of 10 packs Pack of 120 strips (of 8 tubes) | 1 pkg 1 case |
| P_3364 | Flat caps (thin wall) Size: 0.5 ml volume Pack of 1000 tubes | 1 pkg |

ACCESSORIES

PCR microtubes

All polypropylene, thin-walled for efficient thermal transfer and shorter cycle times; fits all leading thermal cyclers including Applied Biosystems, Biometra, MJ Research, Techne, Grant, and Stratagene (0.65 ml only). All are fully autoclavable and certified DNase- and RNase-free. All tolerate organic solvent reactions and temperatures from -4 to 121 °C.



| Product | Product Description | Quantity |
|---------------------------|---|-----------------|
| Z37,487-3 | Size: 0.2 ml Each tube has an individual flip cap Case of 4 pkg Pkg of 250 tubes | 1 pkg 1 case |
| Z37,488-1 | Size: 0.65 ml Each tube has an individual flip cap Case of 4 pkg Pkg of 250 tubes | 1 pkg 1 case |
| Z37,496-2 | Strip tubes: 0.2 ml Strips of eight tubes connected with double bridges to avoid accidental separation. Caps also are in strips of eight. Can be cut apart to use individually if desired. Pkg of 250 strips (2,000 tubes and caps) | 1 pkg |

Pierceable cap strips for PCR tubes

Caps in strips of eight; the center of each cap can be pierced with a hypodermic needle for quick sample removal without generating aerosols or other sources of cross-contamination. Caps can be used with 0.2 ml PCR strip tubes and 96-well plates.



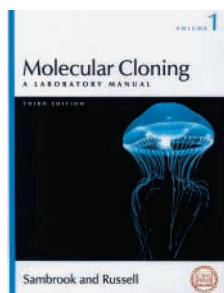
| Product | Product Description | Quantity |
|---------------------------|---|----------|
| Z37,495-4 | Pierceable cap strips For PCR tubes Pkg of 120 strips (960 caps) | 1 pkg |

BOOKS

Molecular Cloning: A Laboratory Manual, 3rd ed., Vols. 1, 2 and 3

J.F. Sambrook, D.W. Russell, and N. Irwin, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, 2000, 2100 pp., Soft cover

In this new edition, authors Joe Sambrook and David Russell have completely updated the book, revising every protocol and adding a mass of new material, to broaden its scope and maintain its unbeatable value for studies in genetics, molecular cell biology, developmental biology, microbiology, neuroscience, and immunology. As in earlier editions, this is the only manual that explains how to achieve success in cloning and provides a wealth of information about why techniques work, how they were first developed, and how they have evolved. It includes 240 laboratory protocols in DNA science in which over 35% were created especially for this edition, along with coverage of bioinformatics and DNA microarrays.

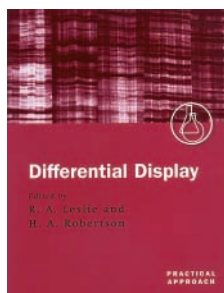


| Product | Product Description | Quantity |
|------------------------|--|----------|
| M 8265 | Molecular Cloning: A Laboratory Manual, 3rd ed., Vols. 1, 2 and 3 ISBN: 0-87969-577-3 | 1 set |

Differential Display: A Practical Approach

R.A. Leslie and H.A. Robertson, Oxford University Press, Oxford, England, 2000, 288 pp., Soft cover

Making sense of the enormous amount of data being generated by various genome projects, especially the human genome project, is an extremely challenging task. Understanding the ways in which genes are differentially expressed in various tissues and cell types, throughout ontogenetic development and in pathological processes, will go a long way towards understanding the function of all these "new" genes and their protein products. This book explains in detail how to perform the technique of RT-PCR Differential Display in various kinds of experimental biological systems.

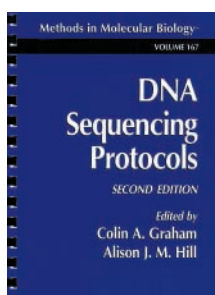


| Product | Product Description | Quantity |
|------------------------|---|----------|
| D 2186 | Differential Display: A Practical Approach ISBN: 0-19-963758-X | 1 each |

DNA Sequencing Protocols, 2nd ed.

C.A. Graham and A.J.M. Hill, Humana Press, 2001, 244 pp., Soft cover

Major advances have made PCR-based semiautomated fluorescent sequencing the norm. This new edition provides up-to-date PCR-based methods for DNA sequencing, many suitable for human genome sequencing and mutation detection in human disease. It offers new material on automated DNA sequencers, capillary DNA sequencers, heterozygote mutation detection, web-based sequencing databases and genome sequencing sites, and the human genome project. It offers easy-to-follow methods that will improve the accuracy and quality of DNA sequences obtained by smaller laboratories and help lay the foundation for molecular diagnostics. Methods in Molecular Biology Series #167



| Product | Product Description | Quantity |
|------------------------|--|----------|
| D 4814 | DNA Sequencing Protocols, 2nd ed. ISBN: 0-896-03721-5 | 1 each |

Order: 1.800.325.3010 Technical Service: 1.800.325.5832

Related PCR Reagents
and Accessories

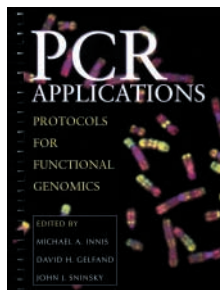


BOOKS

PCR Applications: Protocols for Functional Genomics

M.A. Innis, D.H. Gelfand, and J.J. Sninsky, Academic Press, San Diego, CA, 1999, 584 pp., Soft cover

From ready mutation of DNA/RNA to speedy analysis of tens of thousands of nucleotide sequences, PCR Applications examines the latest developments in this field. It includes statistical refinement of primer design parameters, techniques used in microscopic tissue samples, such as single cell PCR, whole cell PCR, laser capture microdissection, and *in situ* PCR. The manual discusses techniques that focus on gene discovery, genomics, and DNA array technology.

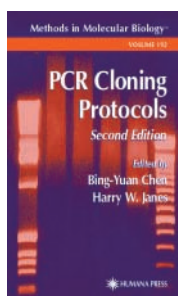


| Product | Product Description | Quantity |
|------------------------|--|----------|
| P 4609 | PCR Applications: Protocols for Functional Genomics ISBN: 0-12-372186-5 | 1 each |

PCR Cloning Protocols, 2nd ed.

B.Y. Chan and H.W. Janes, Humana Press, 2002, 421 pp., Comb bound

This edition updates and expands Bruce White's best-selling "PCR Protocols" (1997) with the newest procedures for DNA cloning and mutagenesis. Here the researcher will find readily reproducible methods for all the major aspects of PCR use, including PCR optimization, computer programs for PCR primer design and analysis, and novel variations for cloning genes of special characteristics or origin, with emphasis on long PCR and GC-rich template amplification.

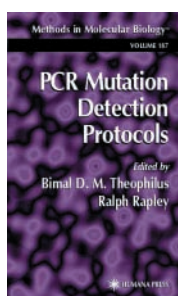


| Product | Product Description | Quantity |
|------------------------|---|----------|
| P 8117 | PCR Cloning Protocols, 2nd ed. ISBN: 0-89603-973-0 | 1 each |

PCR Mutation Detection Protocols

B.D. Theophilus and R. Rapley, Humana Press, 2002, 224 pp, Hard cover

This book provides biological and clinical investigators with a comprehensive collection of new, recent, and updated PCR-based screening methods suitable for detecting the presence of both known and novel mutations. The methods cover point mutations (e.g., ASO-PCR, SSCP, DGGE, chemical cleavage), deletions (multiplex PCR, FISH, blotting), non-sense mutations (PTT), and more. The new techniques of DNA array analysis, along with such recently developed experimental methods as conformation-sensitive gel electrophoresis, are also included. Methods in Molecular Biology #187.



| Product | Product Description | Quantity |
|------------------------|---|----------|
| P 8867 | PCR Mutation Detection Protocols ISBN: 0-89603-617-0 | 1 each |