

# REVERSE TRANSCRIPTASE PCR\*

## BACKWARDS TO THE FUTURE

Got RNA? Need a copy of its parent? Reverse transcription allows just that! Combine this process with PCR and you've got reverse transcriptase PCR (RT-PCR)—and abundant copies of the parent DNA!

If you need it—we've got it. From high-powered polymerases to high-tech thermal cyclers\*, Fisher has what you need for any kind of PCR. Our wide range of RT-PCR enzymes and systems includes those optimized for tough templates—whether long, GC-rich, or contaminated!

### All you need for RT

#### (REVERSE TRANSCRIPTASE) PCR

#### Available from FISHER

REVERSE TRANSCRIPTASES (M-MLV, AMV, RAV-2)	X
LICENSED* STANDARD OR HIGH-FIDELITY TAQ DNA POLYMERASES	X
OLIGONUCLEOTIDE PRIMERS	X
REACTION BUFFERS AND MgCl <sub>2</sub> SOLUTIONS	X
DEOXYNUCLEOTIDE 5'-TRIPHOSPHATES (dNTPs)	X
PCR CONSUMABLES (THIN-WALL TUBES, MULTIWELL PLATES)	X
THERMAL CYCLERS (GRADIENT OR NONGRADIENT)	X
PREPACKAGED KITS AND PREMIXES WITH RNase INHIBITOR	X

Don't forget—Fisher can also fulfill your needs for barrier filter tips, electrophoresis reagents, PCR clean-up kits, and other related products!

### GET READY!

Go to the PCR source—  
[www.fishersci.com/pcr/](http://www.fishersci.com/pcr/)

### GET SET!

Click on the relevant PCR application and you'll see a complete menu of all the PCR reagents and equipment you need. Zip through our easy ordering process, and you're all set to...

### GO AMPLIFY!

#### TO ORDER FISHER PCR PRODUCTS CONTACT:

Customer Service: 800-766-7000

Online: [www.fishersci.com](http://www.fishersci.com)



## REVERSE TRANSCRIPTASE PCR

\*Purchase of each *Taq* DNA Polymerase is accompanied by a limited license to use it in the Polymerase Chain Reaction (PCR) process for research in conjunction with a thermal cycler whose use in the automated performance of the PCR process is covered by the up-front license fee, either by payment to Applied Biosystems or as purchased, i.e., an authorized thermal cycler.

The Eppendorf Mastercycler and the Thermo Hybaid thermal cyclers are each Authorized Thermal Cyclers and may be used with PCR licenses available from Applied Biosystems. The use of either thermal cycler with Authorized Reagents also provides a limited PCR license in accordance with the label rights accompanying such reagents.

Trademarks found on this datasheet:

Fisher BioReagents  
Applied Biosystems  
BcaBest  
BD  
Corning  
Costar  
Eppendorf  
*Ex Taq*  
ImProm-II  
Mastercycler  
Master *Taq*  
Molecular BioProducts  
Nunc  
PanVera  
Promega  
Sigma-Genosys  
TaKaRa

## Enzymes

Fisher offers a variety of RT enzymes, including M-MLV, AMV, RAV-2, and ImProm-II (Promega), plus convenient premixes like cMaster RT and the Promega Reverse Transcription System. For PCR\* after RT, choose either a licensed\* standard or high-fidelity (Pierce *Taq*, Eppendorf Master *Taq* or TaKaRa *Ex Taq*) polymerase, depending on application. For ultimate convenience, the Eppendorf cMaster RT plus PCR premix offers choice of one- or two-step RT-PCR protocol!

## Custom Synthetic Oligonucleotide Primers

Without complementary primer oligos, there would be no PCR! These crucial reagents can be custom synthesized by Sigma-Genosys via Fisher. Just specify the desired nucleotide sequence, modifications and purification options, concentration, and amount and aliquots needed. Order custom primer oligos at [www.fisheroligos.com](http://www.fisheroligos.com)!

## Reaction Buffers

Pre-made reaction buffers ensure consistency! A complete lineup of Reaction Buffers and 25mM MgCl<sub>2</sub> is available from Fisher BioReagents, Eppendorf, and Promega. Buffer with 15mM MgCl<sub>2</sub> is optimal for routine PCR; magnesium-free buffer can be optimized with added MgCl<sub>2</sub>.

## Deoxynucleotide Triphosphates (dNTPs)

Ready-to-use, high-purity dNTP solutions save reagent prep time for the busy lab—and ensure consistent incorporation of bases! Individual dNTPs, sets of individual dNTPs, and dNTP premixes are available from Fisher BioReagents, Eppendorf, TaKaRa and Promega.

## PCR Consumables

Tubes, strips, tips, plates, plate-sealing accessories—from Fisher, Eppendorf, Molecular BioProducts, Nunc, Corning Costar, BD, and more. Whatever consumables you need for PCR, we've got them waiting! Polypropylene reaction tubes and PCR plates have extra-thin walls to ensure optimal heat transfer—perfect for use in thermal cyclers. Most are certified DNase-, RNase-, and human genomic DNA-free; some are also pyrogen- or PCR inhibitor-free!

## Thermal Cyclers\*

With a gradient cycler, you can discover the ideal annealing temperature for your PCR protocol rapidly and reliably. The Eppendorf Mastercycler family includes flexible, easily programmed gradient and nongradient cyclers that support both tubes and microplates. For special Mastercycler packages, see [www.fishersci.com/pcr/](http://www.fishersci.com/pcr/). The Thermo Hybaid line of thermal cyclers also includes gradient and nongradient cyclers, including models that offer true robot compatibility!

## Kits and Premixes

Fisher's wide range of convenient kits offers all the necessary reagents for single-tube RT-PCR—both in one- and two-step configurations. Check out TaKaRa's One Step RNA PCR and RNA PCR Kits, mRNA Selective PCR Kit, and BcaBest RNA PCR Kit, as well as specially designed kits for long-template and one-step real time RT-PCR. With Promega's Access RT-PCR Introductory System, you can detect as little as 1pg of RNA!

For more information on our PCR products, visit [www.fishersci.com/pcr/](http://www.fishersci.com/pcr/).



For customer service, call 1-800-766-7000.  
To fax an order, use 1-800-926-1166.  
To order online: [www.fishersci.com](http://www.fishersci.com)

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