



HOT START PCR^{*}

TO FIND THE PERFECT MATCH—TURN UP THE HEAT

PCR primers and templates match better at higher temperatures, but hot reagents can be hard to work with. That's why hot start PCR uses a variety of barriers to keep the reaction components separate—until the heat is on!

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—including the latest in innovative hot start technology!

All you need for HOT START PCR

Available from FISHER

LICENSED* TAQ DNA POLYMERASES WITH TEMPERATURE-DEPENDENT ACTIVATION FUNCTIONALITY **X**

OLIGONUCLEOTIDE PRIMERS **X**

REACTION BUFFERS AND MgCl₂ SOLUTIONS **X**

DEOXYNUCLEOTIDE 5'-TRIPHOSPHATES (*dNTPs*) **X**

PCR CONSUMABLES
(THIN-WALL TUBES, MULTIWELL PLATES, AND TUBES WITH WAX BEAD BARRIER) **X**

THERMAL CYCLERS (*GRADIENT OR NONGRADIENT*) **X**

PREPACKAGED KITS AND PREMIXES **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/

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



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*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
BD
Corning
Costar
EasyStart
Eppendorf
Ex Taq
HotMaster
HotStart
Mastercycler
Molecular BioProducts
Nunc
PanVera
Promega
Sigma-Genosys
TaKaRa

Enzymes

Fisher offers a selection of licensed* enzymes providing innovative solutions to the hot start dilemma. **Eppendorf** HotMaster *Taq* DNA Polymerase includes a thermostable ligand that provides not only hot start, but "cold stop" as well! With the inhibitor inactivating the polymerase at the lower, annealing temperature (the cold stop), every cycle—not just the initial one—becomes a hot start when the inhibitor is released at the higher temperature, activating the enzyme. And for *Taq* monoclonal antibody action, **TaKaRa's** *Taq* and *Ex Taq* Hot Start Versions can't be beat!

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!

Reaction Buffers

Pre-made reaction buffers ensure consistency! A complete lineup of Reaction Buffers and 25mM MgCl₂ is available from **Fisher BioReagents**, **Eppendorf**, and **Promega**. Buffer with 15mM MgCl₂ is optimal for routine PCR; magnesium-free buffer can be optimized with added MgCl₂.

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**, **PanVera**, 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! Don't miss **Molecular BioProducts'** HotStart Storage and Reaction Tubes—these thin-walled tubes have prepositioned wax beads that you can melt over a pre-aliquoted reagent mix. Just store them till you're ready to go!

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/. The **Thermo Hybaid** line of thermal cyclers also includes gradient and nongradient cyclers, including models that offer true robot compatibility!

Kits and Premixes

TaKaRa's hot-start antibody/enzymes are conveniently supplied with dNTPs. **Eppendorf's** HotMaster *Taq* is available as HotMasterMix, a premix of inhibitor enzyme, pre-optimized buffer, and dNTPs. And from **Molecular BioProducts**, EasyStart PCR Mix-in-a-Tube with its pre-aliquoted, standard reagent mixture of dNTPs.

For more information on our PCR products, visit 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

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