PRODUCT: Advantage® HD Polymerase Mix



CATALOG No.

AMOUNT

639262

40 PCR reactions

LOT NUMBER

Specified on product label.

STORAGE CONDITIONS

Store at -20°C.

SHELF LIFE

1 year from date of receipt under proper storage conditions.

SHIPPING CONDITIONS

Dry ice (-70°C)

DESCRIPTION

Advantage HD Polymerase Mix allows highly accurate and efficient PCR amplification. Advantage HD exhibits superior proofreading abilities due to a robust 3'→5' exonuclease activity. Additionally, high specificity is achieved by inclusion of a hot start antibody that inhibits polymerase activity at ambient temperatures. When used with Clontech's optimized reaction buffer, Advantage HD Polymerase achieves the high fidelity, high sensitivity, and high specificity required for critical applications such as gene cloning and amplification of cDNAs for library construction. Sufficient reagents are provided for 40 reactions of 25 µl each.

PACKAGE CONTENTS

- 10 µl Advantage® HD Polymerase Mix $(2.5 \text{ units/}\mu\text{I})$
- 200 µl 5X Advantage® HD Buffer

OTHER

Advantage® HD Polymerase Mix Protocol-at-a-Glance (PT3921-2)

FOR RESEARCH USE ONLY



See back of page.

Clontech

United States/Canada 800.662.2566

Asia Pacific +1.650.919.7300

Europe

+33.(0)1.3904.6880

Japan

+81.(0)77.543.6116

Clontech Laboratories, Inc. ATakara Bio Company 1290 Terra Bella Ave. Mountain View, CA 94043 Technical Support (US) E-mail: tech@clontech.com www.clontech.com

Marion APPROVED BY: ___

(PA8Z3018)

RAW MATERIAL QUALITY CONTROL

Purity

No nicking activity, endonuclease activity, or exonuclease activity was detected after incubation of 0.6 μg of supercoiled pBR322 DNA, 0.65 μg of λ DNA, or 0.6 μg of λ -HindIII digest with 10 units of Advantage HD Polymerase Mix for 1 hr at 74°C.

Unit definition

One unit is the amount of Advantage HD Polymerase Mix that will incorporate 10 nmol of dNTP into acid-insoluble products in 30 min at 74°C using activated salmon sperm DNA as template.

Reaction mixture for unit definition:

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100 mM Tris-HCl (pH 8.3 at 37°C) 

10 mM KCl 

2 mM MgCl_2 

6 mM (NH_4)_2SO_4 

0.1 % TritonX-100 

200 \muM each dATP, dGTP, dCTP 

100 \muM [^3H]-dTTP 

0.001 % BSA 

0.4 mg/ml activated salmon sperm DNA
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FUNCTIONAL QUALITY CONTROL

PCR performance

Good enzyme performance was confirmed by robust, single product PCR amplification using both λ DNA (amplified products: 8, 10, 12, and 15 kb) and human genomic DNA (amplified products: 0.5, 1, 2, 4, 6, and 8 kb) as templates.

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Notice to Purchaser



Advantage® HD Polymerase Mix (Sample-Not for Sale)

CATALOG NO.

639262

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STATEMENT 68

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Clontech Laboratories, Inc.

A Takara Bio Company 1290 Terra Bella Avenue, Mountain View, CA 94043, USA U.S. Technical Support: tech@clontech.com

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United States/Canada Asia Pacific Europe Japan

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