

Advantage® HD Polymerase Mix

Catalog No. 639241	Amount 200 rxns	Lot Number Specified on product label.
------------------------------	---------------------------	--

Description

The Advantage HD Polymerase Mix offers highly accurate and efficient amplification. It 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 our 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 200 reactions of 25 µl each.

Package Contents

- 50 µl Advantage HD Polymerase (2.5 units/µl)
- 1 ml 5X Advantage HD Buffer (containing 5 mM MgCl₂)

Storage Conditions

- Store at -20°C.

Expiration Date

- Specified on product label.

Shipping Conditions

- Dry ice

Product Documents

Documents for our products are available for download at takarabio.com/manuals
The following documents apply to this product:

- Advantage HD Polymerase Mix Protocol-At-A-Glance

Quality Control Data

RAW MATERIAL QUALITY CONTROL

Purity

No nicking or endonuclease activities were detected after incubation of 0.6 µg of supercoiled pBR322 DNA with 10 units of this enzyme for 1 hr at 74°C.

Unit definition

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

Certificate of Analysis

Cat. No. 639241

Advantage HD Polymerase Mix

Reaction mixture for unit definition

100 mM Tris-HCl (pH 8.3 at 37°C)
10 mM KCl
2 mM MgCl₂
6 mM (NH₄)₂SO₄
0.1% TritonX-100
200 μM each dATP, dGTP, dCTP
100 μM [3H]-dTTP
0.001% BSA
0.4 mg/ml activated salmon sperm DNA

FUNCTIONAL QUALITY CONTROL

PCR test

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

It is certified that this product meets the above specifications, as reviewed and approved by the Quality Department.

Advantage® HD Polymerase Mix

CATALOG NO.

639241

NOTICE TO PURCHASER:

Our products are to be used for **Research Use Only**. They may not be used for any other purpose, including, but not limited to, use in humans, therapeutic or diagnostic use, or commercial use of any kind. Our products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products or to provide a service to third parties without our prior written approval.

Your use of this product is also subject to compliance with the licensing requirements, listed below if applicable, and described on the product's web page at <http://www.takarabio.com>. It is your responsibility to review, understand and adhere to any restrictions imposed by these statements.

TRADEMARKS:

©2023 Takara Bio Inc. All Rights Reserved.

All trademarks are the property of Takara Bio Inc. or its affiliate(s) in the U.S. and/or other countries or their respective owners. Certain trademarks may not be registered in all jurisdictions.

Takara Bio USA, Inc.

2560 Orchard Parkway, San Jose, CA 95131, USA

U.S. Technical Support: technical_support@takarabio.com

United States/Canada

800.662.2566

Asia Pacific

+1.650.919.7300

Europe

+33.(0)1.3904.6880

Japan

+81.(0)77.565.6999

6/5/2023