Certificate of Analysis

Advantage® GC 2 PCR Kit

Catalog Nos.	Amount	Lot Number
639120	10 rxn	Specified on product label.
639119	100 rxn	Specified on product label.

Description

Complete kit for efficient, accurate, and convenient amplification of GC-rich templates. The Advantage GC 2 Polymerase Mix contains Titanium® *Taq* DNA Polymerase—a nuclease-deficient N-terminal deletion of *Taq* DNA polymerase plus TaqStart® Antibody to provide automatic hot-start PCR—and a minor amount of a proofreading polymerase. Enough GC-Melt, enzyme mix, and buffer are supplied for PCR amplifications of 50 µl each. Control reagents are also provided.

Package Contents

639120 (10 rxns)	639119 (100 rxns)	
10 µl	100 µl	50X Advantage GC 2 Polymerase Mix
120 µl	2 x 600 µl	5X GC 2 PCR Buffer
200 µl	2 x 1.0 ml	GC-Melt
15 µl	120 µl	50X dNTP Mix (10 mM each)
10 µl	30 µl	Control DNA Template (100 attomoles/µl)
10 µl	40 µl	Control Primer Mix (10 µM each)
400 µl	3 x 1.25 ml	PCR-Grade Water

Storage Conditions

- –20°C

NOTE: At times, precipitate may be observed in the GC-Melt. This precipitate does not affect the performance of the kit. The precipitate can be dissolved rapidly by mixing at room temperature or warming at 37°C for a few minutes.

Shelf Life

- 1 year from date of receipt under proper storage conditions.

Shipping Conditions

- Dry ice (–70°C)

Product Documents

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

- Advantage-GC 2 PCR User Manual (PT 3316-1)

Takara Bio USA, Inc.
1290 Terra Bella Avenue, Mountain View, CA 94043, USA
U.S. Technical Support: techUS@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

(101717)

Quality Control Data

Raw Material Quality Control

Purified N-terminal deletion mutant *Taq* polymerase was tested for enzymatic activity and PCR effectiveness. Endonuclease, exonuclease, and DNA contamination were also performed.

Functional Quality Control

Amplification of a GC-rich cDNA fragment

The Advantage GC 2 Polymerase Mix was tested by amplification of the Control DNA Template using the Control Primer Mix. The Control DNA Template is a 510-bp GC-rich fragment (of which 110 bp is 90% GC-rich) from the insulin-like growth factor receptor II (IGFR II) gene. Amplification was performed in the presence of varying concentrations of GC-Melt (0, 0.5, 1.0, 1.5, and 2 M). Reactions were assembled and performed as described in the User Manual. Cycle parameters were set at:

1 cycle	94°C, 3 min
25 cycles	94°C, 30 sec
	68°C, 1.5 min
1 cycle	68°C, 3 min

5 µl of each PCR product was run on a 2.0 % agarose/EtBr gel. The presence of a major band of 0.5 kb was observed in the lanes corresponding to amplification with 0.5 and 1.0 M GC-Melt.

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

Notice to Purchaser

Advantage® GC 2 PCR Kit

CATALOG NO.

639119, 639120

NOTICE TO PURCHASER:

Our products are to be used for research purposes only. They may not be used for any other purpose, including, but not limited to, use in drugs, in vitro diagnostic purposes, therapeutics, or in humans. 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 prior written approval of Takara Bio USA, Inc.

Your use of this product is also subject to compliance with the licensing requirements listed below 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:

Takara Bio USA, Inc.
1290 Terra Bella Avenue, Mountain View, CA 94043, USA
U.S. Technical Support: techUS@takarabio.com

United States/Canada	Asia Pacific	Europe	Japan
800.662.2566	+1.650.919.7300	+33.(0)1.3904.6880	+81.(0)77.565.6999

10/17/2017