

Advantage® GC 2 PCR Kit

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

<u>639120</u> (10 rxns)	<u>639119</u> (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

- Store at –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.

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-GC 2 PCR User Manual

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:

94°C	3 min	
25 cycles:		
94°C	30 sec]
68°C	1.5 min	
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.

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CATALOG NOS.

639119 & 639120

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.

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