

## Titanium® *Taq* PCR Kit

Catalog Nos.	Amount	Lot Number
639210	100 rxn	Specified on product label.
639211	30 rxn	Specified on product label.

### Description

Titanium *Taq* is a mixture consisting of a 5' exonuclease-deficient *Taq* polymerase, and TaqStart® Antibody, a monoclonal antibody which inhibits *Taq* at ambient temperatures. TaqStart Antibody provides automatic hot start PCR. Enough enzyme and buffer are supplied for 30 PCR reactions of 50 µl each. An aliquot of calf thymus DNA is provided as a control template for amplifying a 407-bp fragment of the BPTI gene using the Control Primer Mix.

### Package Contents

<u>639210</u> (100 rxns)	<u>639211</u> (30 rxns)	
100 µl	30 µl	50X Titanium <i>Taq</i> DNA Polymerase
600 µl	200 µl	10X Titanium <i>Taq</i> PCR Buffer
120 µl	40 µl	50X dNTP Mix (10 mM each)
100 µl	30 µl	Control DNA Template (100 ng/µl)
100 µl	30 µl	Control Primer Mix (10 µM each)
4 x 1.25 ml	2 x 1.25 ml	PCR-Grade Water

### Storage Conditions

- Store at –20°C

### 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](http://takarabio.com/manuals)

The following documents apply to this product:

- Titanium *Taq* PCR Kits User Manual (PT3304-1)
- Titanium *Taq* PCR Kit Protocol-At-A-Glance (PT3304-2)

#### Takara Bio USA, Inc.

1290 Terra Bella Avenue, Mountain View, CA 94043, USA  
 U.S. Technical Support: [techUS@takarabio.com](mailto:techUS@takarabio.com)

United States/Canada 800.662.2566 (102417)	Asia Pacific +1.650.919.7300	Europe +33.(0)1.3904.6880	Japan +81.(0)77.565.6999
--	---------------------------------	------------------------------	-----------------------------

## Quality Control Data

### Raw Material Quality Control

Purified Titanium *Taq* DNA Polymerase was tested for enzymatic activity and PCR performance. Endonuclease, exonuclease, and DNA contamination assays were also performed.

### PCR Performance

Titanium *Taq* was serially diluted and each serial dilution used in a separate PCR reaction with  $\lambda$  genomic DNA as a template. Optimal dilution per reaction was determined as the amount of enzyme required to amplify  $>20$  ng/ $\mu$ l of a 3.5-kb  $\lambda$  fragment with minimal background.

### Functional Quality Control

#### Amplification from a cDNA template

Titanium *Taq* was tested in a 50  $\mu$ l PCR reaction using 5  $\mu$ l of Marathon®-Ready Human Placenta cDNA (Cat. No. 639311) as a template and primers specific for a 1.3 kb fragment from the transferrin receptor gene (0.2  $\mu$ M each). Conditions were set at:

1 cycle	95°C, 1 min
30 cycles	95°C, 15 sec
	68°C, 1.5 min

5  $\mu$ l of the PCR product was run on a 1.2% TAE/agarose gel to confirm the presence of a 1.3-kb band with minimal background. PCR product concentration was measured by fluorometry. The yield was determined to be  $> 5$  ng/ $\mu$ l.

#### Amplification from a genomic DNA template

Titanium *Taq* was tested in a 50- $\mu$ l PCR reaction using 100 ng of calf thymus genomic DNA as a template and primers specific for a 407-bp fragment of the BPTI gene (0.4  $\mu$ M each). Conditions were set at:

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

5  $\mu$ l of PCR product was electrophoresed on a 1.2% TAE/agarose gel to confirm the presence of a 407-bp band with minimal background. PCR product concentration was measured by fluorometry. The yield was determined to be  $\geq 15$  ng/ $\mu$ l.

## Titanium® Taq PCR Kit

### CATALOG NO.

639210, 639211

### 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:

©2017 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.

1290 Terra Bella Avenue, Mountain View, CA 94043, USA

U.S. Technical Support: [techUS@takarabio.com](mailto: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

10/24/2017