# TaqMan<sup>™</sup> RNase P Control Reagents Kit

VIC<sup>™</sup> dye

Catalog Number 4316844

**Pub. No.** 4316848 **Rev.** D

**WARNING!** Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from **thermofisher.com/support**.

# **Product description**

The RNase P gene is a single-copy gene encoding the RNA moiety for the RNase P enzyme. The Applied Biosystems<sup>™</sup> TaqMan<sup>™</sup> RNase P Control Reagents Kit contains a 20X mix of primers and probe (VIC<sup>™</sup> dye, with TAMRA<sup>™</sup> quencher) that can be used to detect and quantify genomic copies of the human RNase P gene. The primers and probe are designed according to Primer Express guidelines for quantitation and utilize the universal thermal cycling parameters. This kit is designed to be used with a 5' nuclease assay with TaqMan<sup>™</sup> Universal PCR Master Mix (Cat. No. 4304437) with genomic, plasmid or complementary DNA (cDNA).

The TaqMan<sup>™</sup> RNase P Control Reagents were designed with limiting primer concentrations to be used as the endogenous reference in multiplex reactions. Multiplex PCR is the use of more than one primer pair in the same tube.

The TaqMan<sup>™</sup> RNase P Control Reagents are not compatible with the StepOne<sup>™</sup> System. They are compatible with the StepOnePlus<sup>™</sup> System and all other Applied Biosystems<sup>™</sup> Real-Time PCR Systems.

## **Contents and storage**

Contents	Amount <sup>[1]</sup>	Storage
20X RNase P Primer-Probe (VIC <sup>™</sup> dye) Mix	2 × 1.25 mL	–25°C to –15°C
Human Genomic Control DNA, 10 ng/µL	100 µL	

<sup>[1]</sup> Sufficient for 1,000 50-µL reactions

## Procedure

1. The TaqMan<sup>™</sup> RNase P Control Reagents were optimized using the TaqMan<sup>™</sup> Universal PCR Master Mix. To prepare the reaction components for one 50-μL reaction:

Reaction component	Volume per well	Final concentration
TaqMan <sup>™</sup> Universal PCR Master Mix (2X)	25 µL	1Х
20X RNase P Primer-Probe (VIC™ dye) mix	2.5 µL	1X
20X Target Primers and Probe	2.5 µL	1X
Template	1–20 μL	_
RNase-free water	Variable <sup>[1]</sup>	_
Total	50 μL	_

<sup>[1]</sup> Volume of RNase-free water ( $\mu$ L) = 20 –template sample volume.



2. Follow the User Guide for your instrument to set up the following thermal cycling conditions:

	Times and temperatures			
Thermal cycler	Each of 40 cycles		of 40 cycles	
	Initial	Steps	Melt	Anneal/extend
Applied Biosystems <sup>™</sup> Real-	HOLD	HOLD	CYCLE	
Time PCR Systems	2 minutes at 50°C	10 minutes at 95°C	15 seconds at 95°C	1 minute at 60°C

# Limited product warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale found on Life Technologies' website at **www.thermofisher.com/us/en/home/global/terms-and-conditions.html**. If you have any questions, please contact Life Technologies at **www.thermofisher.com/support**.

The information in this guide is subject to change without notice.

#### DISCLAIMER

TO THE EXTENT ALLOWED BY LAW, LIFE TECHNOLOGIES AND/OR ITS AFFILIATE(S) WILL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE, MULTIPLE, OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING FROM THIS DOCUMENT, INCLUDING YOUR USE OF IT.

#### Revision history: Pub. No. 4316848

Revision	Date	Description
D	26 April 2016	Format, style, and legal updates
С	September 2009	Baseline for this revision history

Important Licensing Information: These products may be covered by one or more Limited Use Label Licenses. By use of these products, you accept the terms and conditions of all applicable Limited Use Label Licenses.

Corporate entity: Life Technologies Corporation | Carlsbad, CA 92008 USA | Toll Free in USA 1 800 955 6288

©2016 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified.

