



Product Manual

AMPIGENE[®] qPCR Green Mix Hi-ROX

Catalog #: ENZ-NUC104

ENZ-NUC104-0200 for 200 rxns

ENZ-NUC104-1000 for 1000 rxns



Product Manual

USE FOR RESEARCH PURPOSES ONLY

Unless otherwise specified expressly on the packaging, all products sold hereunder are intended for and may be used for research purposes only and may not be used for food, drug, cosmetic or household use or for the diagnosis or treatment of human beings. Purchase does not include any right or license to use, develop or otherwise exploit these products commercially. Any commercial use, development or exploitation of these products or development using these products without the express written authorization of Enzo Life Sciences, Inc. is strictly prohibited. Buyer assumes all risk and liability for the use and/or results obtained by the use of the products covered by this invoice whether used singularly or in combination with other products.

LIMITED WARRANTY; DISCLAIMER OF WARRANTIES

These products are offered under a limited warranty. The products are guaranteed to meet all appropriate specifications described in the package insert at the time of shipment. Enzo Life Sciences' sole obligation is to replace the product to the extent of the purchasing price. All claims must be made to Enzo Life Sciences, Inc., within five (5) days of receipt of order. THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES OR LIABILITIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT OF THE PATENT OR OTHER INTELLECTUAL PROPERTY RIGHTS OF OTHERS, AND ALL SUCH WARRANTIES (AND ANY OTHER WARRANTIES IMPLIED BY LAW) ARE EXPRESSLY DISCLAIMED.

TRADEMARKS AND PATENTS

Several Enzo Life Sciences products and product applications are covered by US and foreign patents and patents pending. Enzo is a trademark of Enzo Life Sciences, Inc.

FOR RESEARCH USE ONLY.

**THE PRODUCT MAY BE USED ONLY FOR *IN VITRO*
RESEARCH PURPOSES.**



Please read entire booklet before proceeding with the assay.



Carefully note the handling and storage conditions.



Please contact Enzo Life Sciences Technical Support if necessary.

TABLE OF CONTENTS

Description	2
Shipping and Storage	2
Instrument Compatibility	3
Important Considerations	3
Reaction Setup	4
Contact Information	6

DESCRIPTION

Combined with the latest advancements in polymerase technology and advanced buffer chemistry AMPIGENE[®] qPCR Green Mix offers market leading performance with minimal optimization. AMPIGENE[®] qPCR Green Mix uses a proprietary intercalating dye which does not inhibit PCR, unlike other popular dyes.

AMPIGENE[®] qPCR Green Mix uses proprietary small molecular inhibitor technology that prevents formation of primer-dimers to improve reaction sensitivity and specificity.

High-throughput screening has resulted in a buffer system that allows efficient amplification from GC-rich and AT-rich templates, under fast and standard cycling conditions.

Pack Size	Format	
200 x 20µl rxns	2x AMPIGENE [®] qPCR Green Mix Hi-ROX	2 x 1ml
1000 x 20µl rxns	2x AMPIGENE [®] qPCR Green Mix Hi-ROX	10 x 1ml

SHIPPING AND STORAGE



Protect from prolonged exposure to light.

On arrival the kit should be stored at -20°C. Avoid prolonged exposure to light. If stored correctly the kit will retain full activity for 12 months. The kit can be stored at 4°C for 1 month. The kit can go through 30 freeze/thaw cycles with no loss of activity.

INSTRUMENT COMPATIBILITY

Manufacturer	Instrument	Lo-ROX	Hi-ROX
Analytica Jena	qTower	Yes	Yes
Applied Biosystems	7500, 7500 FAST, Viiia7™	Yes	No
Applied Biosystems	7000, 7300, 7700, 7900, 7900HT, 7900HT FAST, StepOne™, StepOne™ Plus	No	Yes
Bio-Rad®	iCycler®, MyiQ®, iQ™5, Opticon™, Opticon™2, Chromo4™, MiniOpticon™, CFX96™, CFX384™	Yes	No
Cepheid®	Smartcycler®	Yes	Yes
Eppendorf	Mastercycler® ep realplex, Mastercycler® realplex 2S	Yes	Yes
Illumina®	Eco™	Yes	Yes
Qiagen/Corbett	Rotor-Gene™ 3000, 6000, Q	Yes	Yes
Roche Applied Science	Lightcycler® 480, Lightcycler® Nano	Yes	Yes
Stratagene (Agilent)	MX 4000P®, MX 3000P®, MX 3005P®	Yes	No
Takara	Cycler Dice®	Yes	Yes
Techne	Quantica®	Yes	Yes

IMPORTANT CONSIDERATIONS

Primer design: For efficient amplification under fast cycling conditions we recommend amplicon lengths between 80bp and 200bp. With all manufacturers master mixes the shorter the amplicon length the faster the reaction can be cycled. Amplicon lengths should not exceed 400bp. Primers should have a predicted melting temperature of around 60°C.

REACTION SETUP

1. Briefly vortex 2x AMPIGENE[®] qPCR Green Mix Hi-ROX.
2. Prepare a master mix based on the following table:

Reagent	20µl reaction	Final concentration	Notes
2x AMPIGENE [®] qPCR Green Mix Hi-ROX	10µl	1x	
Forward primer (10µM)	0.8µl	400nM	See above for optimal primer design
Reverse primer (10µM)	0.8µl	400nM	
Template DNA	<100ng cDNA, <1µg genomic	variable	See above for template considerations
PCR grade dH ₂ O	Up to 20µl final volume		

3. Program the instrument using following conditions, acquiring data on the SYBR[®] Green or FAM channel:

Cycles	Temperature	Time	Notes
1	95°C	2min	Polymerase activation, 2 minutes for cDNA and 3 minutes for genomic
40	95°C 60°C to 65°C	5 seconds 20-30 seconds	Denaturation Anneal/Extension (do not exceed 30 seconds, do not use temperatures below 60°C)
Melt analysis	Refer to instrument instructions		Optional melt profile analysis



Product Manual

NOTES



Product Manual

GLOBAL HEADQUARTERS

Enzo Life Sciences Inc.
10 Executive Boulevard
Farmingdale, NY 11735
Toll-Free: 1.800.942.0430
Phone: 631.694.7070
Fax: 631.694.7501
info-usa@enzolifesciences.com

EUROPE/ASIA

Enzo Life Sciences (ELS) AG
Industriestrasse 17
CH-4415 Lausen
Switzerland
Phone: +41/0 61 926 89 89
Fax: +41/0 61 926 89 79
info-ch@enzolifesciences.com

For local distributors and detailed product information visit us online:
www.enzolifesciences.com