



ig® SYBR Green qPCR 2X Master Mix

Manual

Catalog #	3354	3356	3357
Package Size	200 reactions	500 reactions	2,000 reactions
Volume	20 µl		



Important!

-20°C Storage Required

- * Immediately inspect packages
- * Freeze upon receipt



visit us online for more
products & custom services

Intact Genomics, Inc.

Table of Contents

Product Description.....	3
Applications.....	3
Benefits.....	3
Components and Storage.....	3
Protocol.....	4
Related Products.....	5
Ordering Information.....	5
Technical Support.....	6

Description:

Intact Genomics SYBR® Green qPCR 2x master mix is a ready-to-use cocktail containing all components except primers and template for the amplification and detection of DNA in qPCR. The ig SYBR® Green qPCR 2x master mix with integrated chemically-modified hot start *Taq* DNA polymerase, SYBR® Green I fluorescent dye, ROX dye*, MgCl₂, dNTPs and stabilizers. This master mix is ideal for high-throughput real-time PCR screening and validation. The amplification step features a high quality hot start *Taq* DNA Polymerase which offers higher fidelity and better amplification.

**The use of ROX dye is necessary for all Applied Biosystems instruments and is optional for the Stratagene Mx3000P™, Mx3005P™, and Mx4000™ cyclers. Bio-Rad, Qiagen, Eppendorf, Illumina and Roche instruments do not require ROX dye. The concentration of ROX Dye is (5 nM) for this product.*

Applications:

- Gene expression data validation
- Absolute quantification
- Mutation detection
- Pathogen detection
- Viral detection
- Genetically modified organisms (GMO) characterization
- Genetic profiling

Benefits:

- Enhanced efficiency, specificity, and sensitivity
- Compatible with all real-time PCR instruments
- Superior gene expression results under various cycling conditions
- Robust and active for cDNA synthesis at temperatures up to 55 °C

Product Components and Storage Temperature:

- ig® SYBR Green qPCR 2x Master Mix
- –20 °C

Protocol:

1. Place kit components, primers and RNA samples on ice.
2. Mix and then centrifuge briefly to collect contents at the bottom of the tube.
3. Prepare a master mix for each reaction and control plus 10% extra to allow for pipetting error according to the following table:

PCR reaction set up:	
Diluted cDNA	1.5 µl
Forward primer (5 µM)	1.0 µl
Reverse primer (5 µM)	1.0 µl
ig™SYBR Green qPCR 2x master mix	10.0 µl
H ₂ O up to	20.0 µl

4. Mix the reaction mixture thoroughly.
5. Program the thermal cycler according to the manufacturer's instructions.
6. A typical PCR cycling program is outlined in the following table:

PCR Cycling Conditions			
Steps	Temperature	Time	Cycles
Initial denaturation	95 °C	15 min	1
Denaturation	95 °C	5 sec	30-40
Annealing/Extension**	~60 °C	30 sec	
Melting curve analysis	According to instrument guidelines		

7. Place the PCR tubes in the thermal cycler and start the cycling program.
8. Analyze the data according to manufacturer protocol.

Note: For 3 step cycling protocols, anneal at optimal annealing temperature for 30 sec followed by the minimum time required for data acquisition at 72 °C according to instrument guidelines.

Related Products:

- igScript™ One Step RT-PCR Kit (Cat.# 4211)
- igScript™ One Step RT-qPCR Kit (Cat.# 4214)
- igScript™ First Strand cDNA Synthesis Kit (Cat.# 4312)
- igScript™ Reverse Transcriptase (Cat.# 3344)
- igScript™ Probe Based One Step RT-qPCR Kit (Cat.# 4243, 4245, 4247)

Ordering Information:

- Order online within the USA. Place orders on **www.intactgenomics.com** using our secure Shopping Cart.
- Order by email, phone, or fax.
Email: **sales@intactgenomics.com**
Phone: (314) 942-3655 | Toll-free : 855-835-7172 | Fax: (314) 942-3656
- Order via our distributors.

Intact Genomics owns the following registered trademarks granted by the United States Patent and Trademark Office (USPTO): Intact Genomics®, IG®, ig®, igTherapeutics®, FastAmp®, i7®, DirectPlate®.

All technology protocols discussed within this manual are assumed proprietary to Intact Genomics. This Product may be covered by pending or issued patents or may have certain limitations. Please contact us for more information. Purchase of this material conveys to buyer the non-transferable right to use the material purchased in research conducted by buyer, whether for teaching, non-commercial or commercial research purposes. Buyer may not sell or otherwise transfer these materials, its components, or unmodified descendants to a third party.

Product Use Limitation and Disclaimers

This product is for research purposes only. It is not intended for therapeutic or diagnostic purposes in humans or animals. This product contains chemicals which may be harmful if misused or direct human contact is made.

Intact Genomics is dedicated to practicing and maintaining science and technology ethics. Buyer agrees to use the purchased materials in full compliance with applicable law and regulations.

Technical Support & Customer Services

Intact Genomics (IG®) is dedicated to customer satisfaction regarding the use of our products for your research needs. Each new lot of our products is thoroughly tested to ensure it meets high quality standards and provides excellent results. We appreciate your business and your feedback regarding the performance of our products in your applications. Please follow the instructions carefully and contact us if additional assistance is needed.

Our hours are Monday - Friday, 8AM to 5PM, U.S. Central Standard Time.

Intact Genomics, Inc.

11840 Westline Industrial Drive, Suite 120,
St. Louis, MO. 63146, USA

Phone: (314) 942-3655 | **Toll-free :** 855-835-7172 | **Fax:** (314) 942-3656

Email: sales@intactgenomics.com | ig@intactgenomics.com

Website: www.intactgenomics.com

© 2024 Intact Genomics, Inc
All Rights Reserved

