igScript™ Probe-Based qPCR 2x Master Mix

Manual

Catalog #	4233	4235	4237
Package Size	500 reactions	1,000 reactions	2,500 reactions
Volume	20µl		

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

Description:

igScript™ Probe-Based qPCR 2x Master Mix contains igScript™ *Taq* DNA polymerase, $MgCl_2$, dNTPs, stabilizers, enhancers and low ROX reference dye with standard buffer providing improved qPCR efficiency, wider dynamic range, superior sensitivity and specificity. igScript™ qPCR 2x Master Mix is a ready-to-use cocktail containing all components except primers, probe and template, for the amplification and detection of DNA in qPCR. This 2x master mix requires minimal handling during reaction setup and offer consistent and robust qPCR reactions. *Taq* DNA Polymerase is a thermostable DNA polymerase that possesses a 5´→3´ polymerase (1, 2) and a 5´→3´ exonuclease activity (3, 4). The amplification step features a high quality *Taq* DNA Polymerase which offers robust, reliable and better amplification.

Product Components and Storage:

- igScript™ Probe-Based qPCR 2x Master Mix
- -20 °C

Applications:

- Gene expression data validation
- Multiplexing
- Mutation detection
- Pathogen and viral detection
- Genetically modified organisms (GMO) characterization and Genetic profiling

Benefits:

- Enhanced efficiency, specificity, and sensitivity
- Compatible with all real-time PCR instruments
- Superior gene expression results under various cycling conditions.

Protocol:

1. Place kit components and DNA 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:	
Template DNA	x µl
Forward primer (5 µM)	1.0 µl
Reverse primer (5 µM)	1.0 µl
Probe (5 µM)	0.5 µl
igScript™ qPCR 2x Master Mix	10 µl
H_2O 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	95ºC	3 min	1
Denaturation	95ºC	5 sec	40
Annealing/ Extension*	55-60ºC	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 ºC according to instrument guidelines.

Related Products:

- igScript™ Probe Based One Step RT-qPCR Kit (Cat.#4243, 4245, 4247)
- 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)
- ig® SYBR Green qPCR 2x Master Mix (Cat.# 3354)

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.

References:

1. Chien, A., Edgar, D. B. and Trela, J. M. (1976). J. Bact. 127, 1550-1557.

2. Lawyer, F. C. et al. (1993). PCR Methods and Appl. 2, 275- 287.

3. Longley, M. J., Bennett, S. E. and Mosbaugh D. W. (1990). Nucleic Acids Res.18, 7317-7322.

4. Lyamichev, V., Brow, M. A. and Dahlberg, J. E. (1993). Science. 260, 778-783.

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