

iScript™ RT-qPCR Sample Preparation Reagent

Bio-Rad's iScript RT-qPCR sample preparation reagent delivers efficient cell lysis, RNA stabilization, and removal of genomic DNA for sensitive qPCR without RNA purification. This novel buffer accelerates and streamlines RT-qPCR analysis of cultured cells by eliminating the need for RNA purification and enabling PCR or real-time PCR directly from cell lysates. This system is ideal for rapid, high-throughput gene expression analysis, such as validation of siRNA-mediated gene knockdown.

- Rapid protocol efficiently removes genomic DNA and stabilizes RNA in 5–10 min
- Sensitive detection of high-, medium-, and low-copy gene targets directly from cell lysates
- Reagent enables multiplex real-time detection of up to 4 targets from as few as 10 cells
- Isolated RNA is stable for up to 6 months when frozen

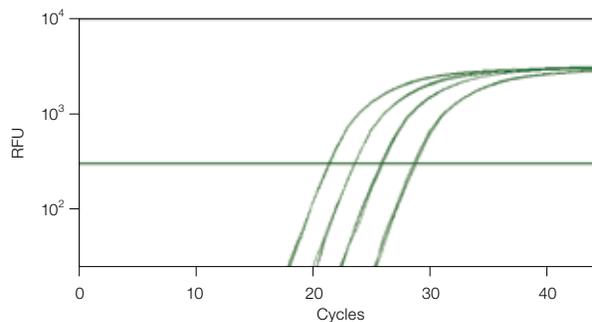
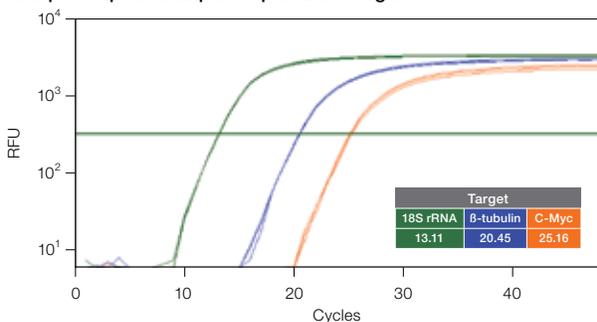
For more information, visit us on the web at www.bio-rad.com/iscript/.



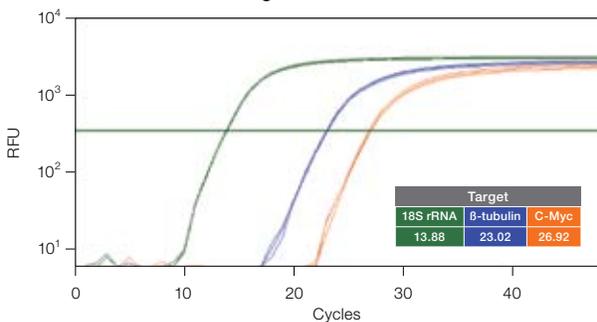
iScript RT-qPCR Sample Preparation Reagent

iScript RT-qPCR sample preparation reagent provides a simple and rapid procedure for isolating total RNA from cultured cells. It represents an entirely new approach to rapid, high-throughput gene expression analysis by eliminating the numerous, time-consuming steps required to purify RNA that is free of contaminating genomic DNA. This one buffer formulation contains all of the necessary components to perform cell lysis, RNA stabilization, and genomic DNA removal for sensitive, quantitative gene expression analysis.

iScript RT-qPCR Sample Preparation Reagent



PureZOL™ RNA Isolation Reagent



iScript RT-qPCR sample preparation reagent generates earlier threshold cycles (C_T s) compared to PureZOL RNA isolation reagent.

HeLa cells were treated with each reagent (125 cells/ μ l) according to the recommended guidelines and analyzed for 18S rRNA (■), β -tubulin (■), and c-Myc (■) expression levels using iScript cDNA synthesis kit and iQ™ SYBR® Green supermix on the CFX96™ real-time PCR detection system. iScript RT-qPCR sample preparation reagent delivers earlier C_T s as compared to PureZOL treatment. Average C_T values for triplicate reactions are shown for each gene target (inset tables). RFU, relative fluorescence units.

iScript RT-qPCR sample preparation reagent generates linear results over varying input cell amounts.

HeLa cells were treated with each reagent (125, 25, 5, and 1 cells/ μ l) according to the recommended guidelines and analyzed for *GAPDH* expression levels using iScript cDNA synthesis kit and iQ™ SYBR® Green supermix on the CFX96 real-time PCR detection system. iScript RT-qPCR sample preparation reagent delivers excellent efficiency and reproducibility for the detection of *GAPDH* from cell extracts. *GAPDH* efficiency = 94.4%, R^2 = 0.996. RFU, relative fluorescence units.

Ordering Information

Catalog #	Description
170-8898	iScript RT-qPCR Sample Preparation Reagent , 100 reactions, 10 ml, contains RNase inhibitors and RNA stabilizers
170-8899	iScript RT-qPCR Sample Preparation Reagent , 500 reactions, 5 x 10 ml, contains RNase inhibitors and RNA stabilizers

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Bio-Rad's real-time thermal cyclers are licensed real-time thermal cyclers under Applied's United States Patent 6,814,934 B1 for use in research, human in vitro diagnostics, and all other fields except veterinary diagnostics.

Bio-Rad's real-time thermal cyclers are covered by one or more of the following U.S. patents or their foreign counterparts owned by Eppendorf AG: U.S. Patent Nos. 6,767,512 and 7,074,367.

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