

## **Real-Time PCR Solutions**

Advanced technologies for data you need, every time



## **Trusted Performance**

#### **Advanced Buffer Formulation**

Our PCR reagent buffers have been refined to deliver top-notch performance.

Use them confidently with a broad range of complex sample types, target regions, as well as under varying reaction parameters (e.g., primer concentrations, annealing temperature, salt concentration, and cycling protocol).

#### **Universal Reference Dyes**

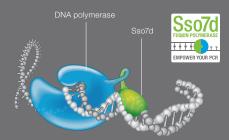
A proprietary blend of reference dyes means you won't need different, system-specific dye concentrations. Instead, reaction setup is easy and data become less variable. Our reference dyes are compatible with high-ROX, low-ROX, and ROX-independent systems.

### **Robust Reliance Reverse Transcriptase**

The Reliance Reverse Transcriptase is genetically engineered for high thermostability and efficient, sensitive cDNA synthesis — even with challenging samples and targets.

### **Powerful Sso7d Fusion DNA Polymerase**

Our Sso7d Fusion DNA Polymerase is designed to succeed where others fail. It features improved processivity for effective amplification through regions of strong secondary structures, GC-rich regions, longer products — even in the presence of PCR inhibitors.



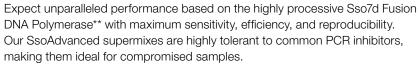


# qPCR Reagents for All, Data You Can Rely On

Bio-Rad's universal qPCR reagents feature:

- Single tube, 2x ready-to-use supermix
- Advanced buffer formulation for optimal performance under varying conditions
- A proprietary blend of universal reference dyes\* compatible with all qPCR systems
- Flexible cycling compatibility for both fast and standard protocols

#### **SsoAdvanced Universal Supermixes**











You perform	Your sample is	Your target is/has
<ul> <li>Gene expression</li> <li>Single-copy detection</li> <li>IncRNA and miRNA expression</li> <li>Low-copy viral/pathogen detection</li> <li>Methylation studies (probe)</li> <li>Copy number variation</li> <li>Mutation detection</li> <li>ChiP</li> <li>Genotying</li> <li>siRNA knockdown</li> <li>Multiplexing of up to 2 targets</li> </ul>	<ul> <li>gDNA from various samples, including tissue, cell lines, plant, soil, FFPE, and LCM</li> <li>Cell lysate</li> <li>Crude extraction</li> <li>Blood spot</li> <li>Plant extract</li> <li>cDNA</li> <li>Plasmid</li> </ul>	<ul> <li>Highly GC rich (&gt;60%)</li> <li>Highly AT rich (&gt;60%)</li> <li>Increased secondary structure</li> <li>&gt;250 bp</li> </ul>

### iTaq Universal Supermixes

These supermixes are ideal for reliable and reproducible performance for various real-time PCR applications.





You perform	Your sample is	Your target is/has	
<ul> <li>Gene expression</li> <li>Genotyping</li> <li>Mutation detection</li> <li>Pathogen detection</li> <li>Multiplexing of up to 2 targets</li> </ul>	<ul> <li>gDNA mostly from tissue and cell lines</li> <li>cDNA</li> <li>Plasmid</li> </ul>	■ 40–60% GC-rich ■ 50–250 bp	

 $<sup>^{\</sup>star}$  U.S. patent 9,493,824.  $^{\star\star}$  U.S. patents 6,627,424; 7,541,170; and 7,560,260.

# Flexible Solutions for Sensitive qPCR Directly from RNA

Bio-Rad's One-Step RT-qPCR Supermix and Kits offer:

- Convenient reaction setup using 1- or 2-tube system
- A proprietary blend of universal reference dyes\* to be compatible with all qPCR systems
- Advanced buffer formulation for optimal performance under varying conditions

### **Reliance One-Step Multiplex Supermix**



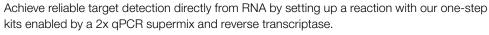




This 4x supermix is expertly formulated for highly sensitive and reliable detection of up to 5 targets directly from RNA. It features genetically engineered ultra-sensitive Reliance Reverse Transcriptase and an optimized blend of powerful DNA polymerases, including Sso7d Fusion DNA Polymerase\*, which provide advanced inhibitor tolerance. Assembled reaction stability (24-hour) makes it ideal for automation and high-throughput workflows.

You perform	Your sample is	Your target is/has
<ul> <li>Multiplexing of up to 5 targets</li> <li>Gene expression</li> <li>Low-copy viral/pathogen detection</li> <li>Food safety studies</li> <li>Diagnostic research</li> <li>High-throughput screening</li> <li>Automated testing</li> </ul>	<ul> <li>Difficult matrices such as blood, serum, or plasma</li> <li>RNA from various samples, including tissue and cell lines</li> <li>Cell lysate</li> <li>Potentially contaminated with PCR inhibitors</li> </ul>	<ul> <li>Highly GC rich (&gt;60%)</li> <li>Internal positive control of RNA or DNA</li> <li>70–250 bp</li> </ul>

### iTaq One-Step Universal Kits







You perform	Your sample is	Your target is/has	
<ul> <li>Gene expression</li> <li>IncRNA and miRNA expression</li> <li>Viral/pathogen detection</li> <li>Mutation detection</li> <li>Pathogen detection</li> <li>siRNA knockdown</li> <li>Multiplexing of up to 2 targets</li> </ul>	<ul> <li>RNA, mostly from tissue and cell lines</li> <li>Cell lysate</li> </ul>	<ul> <li>Highly GC rich (&gt;60%)</li> <li>Highly AT rich (&gt;60%)</li> <li>40–60% GC-rich (SYBR®)</li> <li>50–250 bp</li> </ul>	

cDNA, complementary DNA; Cq, quantification cycle; ChiP, chromatin immunoprecipitation; FFPE, formalin-fixed paraffin embedded; LCM, laser capture microdissection



Integrate Bio-Rad's qPCR reagents with the CFX Automation System II to enable walk-away high-throughput qPCR operation.



Simplify your gene expression or IncRNA expression with expertly designed primers and probe assays and predesigned panels.



Visit bio-rad.com/PrimePCR for more information.



Visit bio-rad.com/CFXauto for more information.



Use high-quality PCR plastics to be confident in your qPCR data. Choose from an extensive range of tube strips, and 48-well, 96-well, and 384-well PCR plates.



Visit bio-rad.com/PCRPlastics for more information.



Choose the best cDNA synthesis kit for your application, with formulations optimized for ease, yield, flexibility, fidelity, or gDNA clearance.



Visit bio-rad.com/iScript for more information.

#### **Ordering Information**

Detection Method	Reaction Size	SsoAdvanced Universal	iTaq Universal	Reliance One-Step Supermix	iTaq Universal One-Step	SsoAdvanced Universal Inhibitor-Tolerant
SYBR® Green	100 x 20 µl reactions	-	-	-	1725150	-
	200 x 20 µl reactions	1725270	1725120	-	-	1725016
	500 x 20 µl reactions	1725271	1725121	-	1725151	1725017
	1,000 x 20 µl reactions	1725272	1725122	-	-	1725018
	2,500 x 20 µl reactions	1725274	1725124	-	-	_
	5,000 x 20 µl reactions	1725275	1725125	-	-	-
Probe	100 x 20 µl reactions	_	_	-	1725140	_
	200 x 20 µl reactions	1725280	1725130	12010176	-	_
	500 x 20 µl reactions	1725281	1725131	_	1725141	_
	1,000 x 20 µl reactions	1725282	1725132	12010220	-	_
	2,000 x 20 µl reactions	-	_	12020221	-	_
	2,500 x 20 µl reactions	1725284	1725134	_	-	_
	5,000 x 20 µl reactions	1725285	1725135		-	-

Visit bio-rad.com/PCRReagents for more information.



Bio-Rad's PCR reagents are manufactured under an ISO 13485:2016 certified Quality Management System and are quality control tested to ensure consistent product performance you can trust.

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