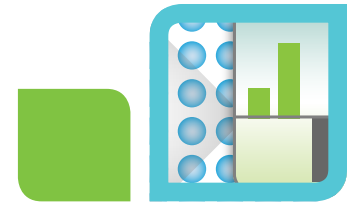


# Got Limited Sample? PreAmp It!

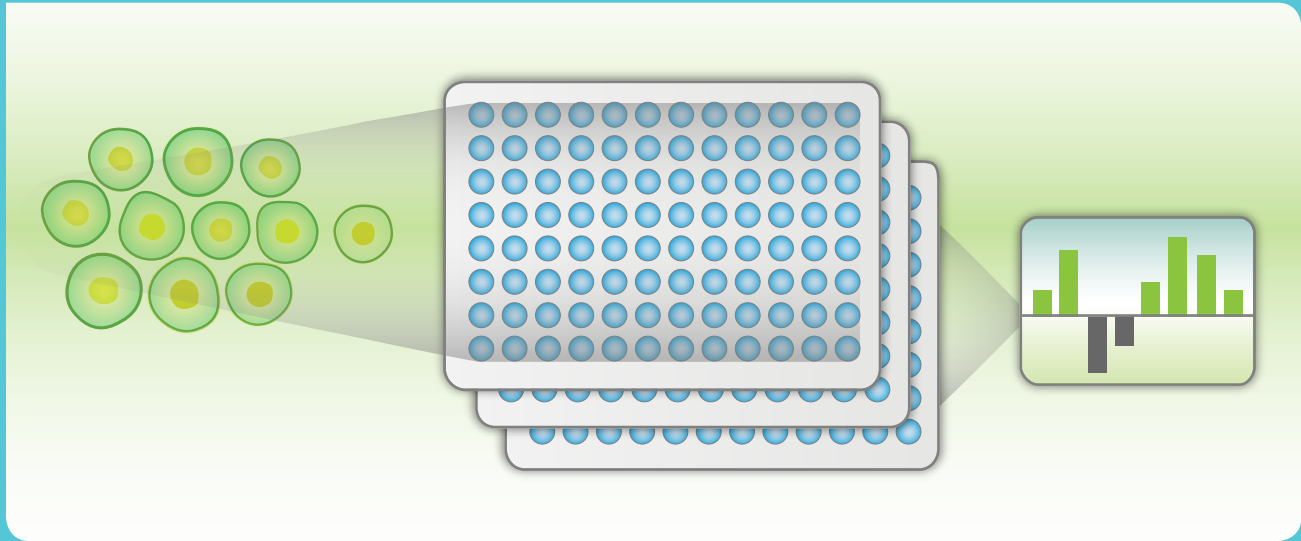


PCR Reagents: SsoAdvanced™ PreAmp Supermix and PrimePCR™ PreAmp Assays

Bulletin 6576

## What is PreAmp?

PreAmp provides the ultimate in unbiased, target-specific preamplification from limited nucleic acids, using up to 400 quantitative PCR (qPCR) or end-point assays and enabling more downstream reactions for screening of respective targets.



### Why use SsoAdvanced PreAmp Supermix?

- Unrivaled, with half the bias specification of the competition
- Requires as little as 100 pg of genomic DNA or cDNA
- Validated for SYBR® Green and probe chemistries
- Optimized for PrimePCR PreAmp Assays
- Improved performance using TaqMan and custom assays
- Superior sensitivity and efficiency
- Economically priced

### Why use PrimePCR PreAmp Assays?

- Available for each PrimePCR gene expression assay
- SYBR® Green and probe versions offered
- Easy to use — no dilutions needed
- Proven performance

- Full wet-lab validation ensures assays meet the minimum information for publication of quantitative real-time PCR experiments (MIQE) guidelines
- Optimized for use with SsoAdvanced PreAmp Supermix

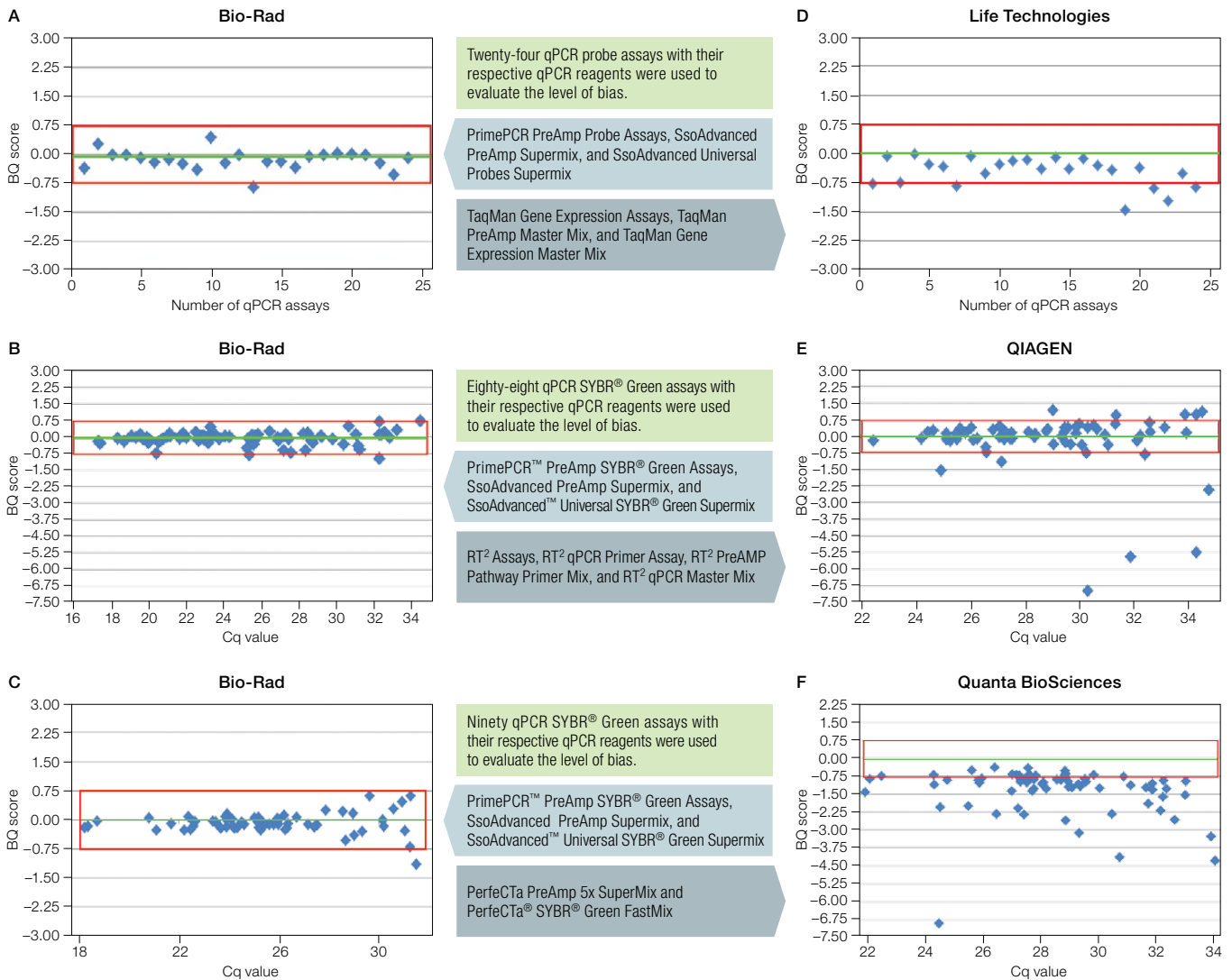
### What types of samples work with PreAmp?

- Stem cells
- Single cells
- Sorted cells
- Formalin-fixed, paraffin-embedded samples
- Small biopsies
- Laser capture microdissection samples
- Plant samples
- Rare samples

Visit [bio-rad.com/web/PreAmp1](http://bio-rad.com/web/PreAmp1) for more information.

**BIO-RAD**

### How do PreAmp products compare to others?



### What is a BQ score?

A bias quantification (BQ) score provides a numerical value for the level of bias observed in a preamplification reaction. It is based on comparing the theoretical difference between a sample with and without PreAmp compared to the observed (actual) difference between a sample with and without PreAmp. Zero indicates no bias, and the farther from zero the BQ score becomes, the greater the bias introduced.

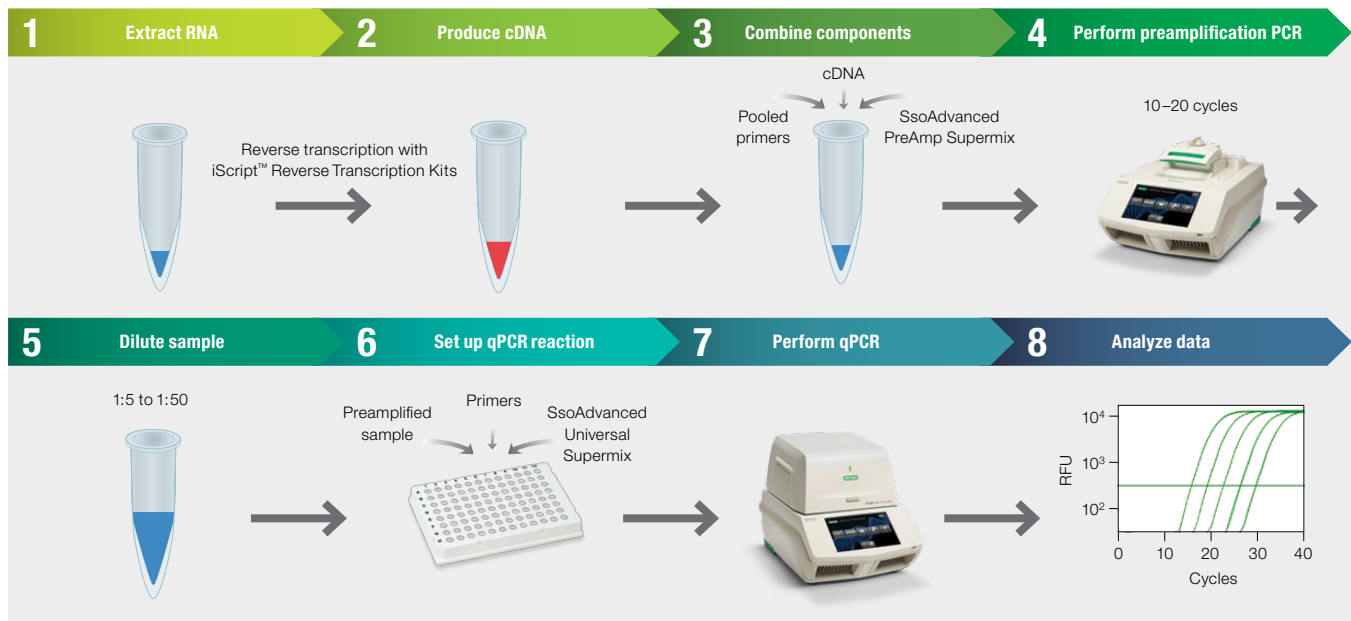
### Want more details?

Property	SsoAdvanced PreAmp Supermix	TaqMan PreAmp Master Mix (Life Technologies)	PerfeCTa PreAmp 5x SuperMix (Quanta BioSciences)
Number of preamplification targets	400	100	100
BQ score	90% ≤ 0.75	90% ≤ 1.50	90% ≤ 1.50
Sensitive detection of low-level target genes	•••	••	•
High efficiency, even for difficult amplicons	•••	••	••
Validated assays	PrimePCR PreAmp, TaqMan	TaqMan	Unknown
Chemistry	SYBR® Green and probes	Probes	SYBR® Green and probes
Number of reactions	50 x 50 µl	40 x 50 µl	40 x 50 µl

- Fair
- Good
- Excellent

**How does it work?**

From RNA to qPCR results, data can be obtained in less than 5 hours using our validated reverse transcription quantitative PCR (RT-qPCR) products.



Preamplification workflow.

**How do I order SsoAdvanced PreAmp Supermix?**

Order online at [bio-rad.com/web/PreAmpSmx](http://bio-rad.com/web/PreAmpSmx), or contact your local sales representative to request a quote for SsoAdvanced PreAmp Supermix (catalog #172-5160).

**How do I order PrimePCR PreAmp Assays?**

Order online at [bio-rad.com/web/PrimePCRPreAmp](http://bio-rad.com/web/PrimePCRPreAmp), or contact your local sales representative for additional information.

**What other validated reagents do I need?**

- iScript cDNA Synthesis Kits provide unbiased representation of target mRNA levels through the use of an RNase H+ Moloney murine leukemia virus (MMLV) reverse transcriptase and optimal priming methodology using a blend of oligo(dT) and random primers. iScript kits are available in single- or multiple-tube formats
  - Order online at [bio-rad.com/web/iScriptKits](http://bio-rad.com/web/iScriptKits), or contact your local sales representative for additional information
- SsoAdvanced Universal Supermixes employ our patented\* Sso7d fusion enzyme technology for higher processivity, increased PCR inhibitor tolerance, and robust performance with challenging templates and target sequences for all real-time PCR applications and all real-time PCR systems. SsoAdvanced Universal Supermixes are available in SYBR® Green and probe versions
  - Order online at [bio-rad.com/web/SsoAdvanced](http://bio-rad.com/web/SsoAdvanced), or contact your local sales representative for additional information

\* U.S. patents 6,627,424; 7,541,170; and 7,560,260.

PerfeCTa is a trademark of Quanta BioSciences, Inc. RT<sup>2</sup> is a trademark of SABiosciences Corporation. SYBR is a trademark of Life Technologies Corporation. Bio-Rad Laboratories, Inc. is licensed by Life Technologies Corporation to sell reagents containing SYBR Green I for use in real-time PCR, for research purposes only. TaqMan is a trademark of Roche Molecular Systems, Inc.

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 Numbers 6,767,512 and 7,074,367.

The use of SsoAdvanced Supermixes and PrimePCR PreAmp Assays is covered by one or more of the following U.S. patents and corresponding patent claims outside the U.S.: 5,804,375; 5,538,848; 5,723,591; 5,876,930; 5,994,056; 6,030,787; 6,171,785; and 6,258,569. The purchase of these products includes a limited, non-transferable immunity from suit under the foregoing patent claims for using only this amount of product for the purchaser's own internal research. No right under any other patent claim and no right to perform commercial services of any kind, including without limitation reporting the results of purchaser's activities for a fee or other commercial consideration, are conveyed expressly, by implication, or by estoppel. These products are for research use only. Diagnostic uses under Roche patents require a separate license from Roche. Further information on purchasing licenses may be obtained from the Director of Licensing, Applied Biosystems, 850 Lincoln Centre Drive, Foster City, California 94404, USA.



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