



Brilliant II FAST and Brilliant II FAST SYBR® QPCR Kits

Next Generation Brilliant II FAST QPCR

- Accelerated cycling protocol that completes 40 cycles of PCR in approximately 48 minutes
- Rapid hot start capability to minimize non specific product formation while reducing run time
- Improved performance with earlier Ct detection across a wide dynamic range
- Increased sensitivity of detection to low copy numbers

Brilliant II and Brilliant II Fast SYBR® for superior results on Stratagene and ABI real-time PCR systems

The Brilliant II and Brilliant II FAST SYBR QPCR Master Mixes are single-tube reagents designed for performing quantitative PCR amplifications with an accelerated cycling protocol that completes 40 cycles of PCR in approximately 48 minutes. The master mix formulations and fast cycling protocol were developed together to create a system for completing QPCR reactions in less time without compromising target detection sensitivity, specificity, or reproducibility. The Brilliant II QPCR Master Mixes have been successfully used with fluorescent TaqMan® probes and SYBR Green to amplify and detect a variety of DNA targets, including genomic DNA, plasmid DNA, and cDNA.

The Brilliant II FAST QPCR kit includes 2× master mix containing hot start *Taq DNA* polymerase, dNTPs, Mg²⁺, and a buffer specially formulated for fast cycling. The Brilliant II FAST SYBR QPCR Master Mix also includes the DNA binding dye SYBR Green for detection. The DNA polymerase features a rapid hot start capability that reduces nonspecific product formation while keeping the run time of the PCR protocol to a minimum, making it ideal for the Brilliant II QPCR kits.

Both Brilliant II FAST master mixes have been developed, tested, and validated on our Mx3000P and Mx3005P QPCR systems. By utilizing our Mx QPCR systems in combination with our new Brilliant II FAST QPCR reagents, you will benefit from a fully integrated system optimized to function at peak performance. We also validated these kits on ABI systems to provide maximum flexibility across a wide range of QPCR instruments.

Improved sensitivity of detection and more robust amplification

The new Brilliant II FAST master mix reagents are designed to provide you with improved sensitivity when compared with other commercially available FAST QPCR reagents. Figures 1 and 2 show the improved sensitivity of our new Brilliant II FAST QPCR master mix compared to other commercially available reagents run on the Mx3005P system with earlier Ct detection and improved replicate reproducibility. Figure 3 illustrates both the sensitivity and the robust amplification observed with Brilliant II FAST QPCR master mix on the Stratagene Mx3005P.

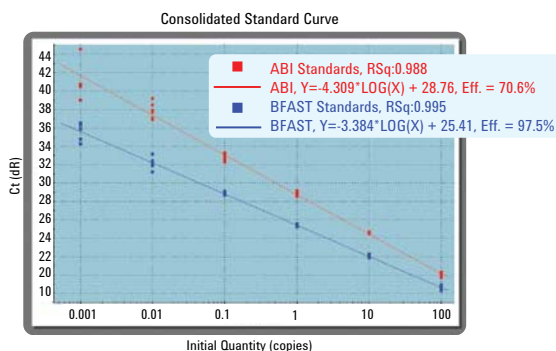


Figure 1
Brilliant II FAST master mix delivers better sensitivity over a wide range of concentrations
Standard Curve for Brilliant II FAST (#600845) and ABI TaqManFast® Universal PCR Master Mix on a Gus 7 "Assay on Demand" gene target across five 10-fold dilutions with eight replicates at each concentration run on the Mx3005P. The Brilliant II master mix generates Ct values ~4 cycles earlier (represents more than a 10-fold difference in detection) than the ABI master mix.

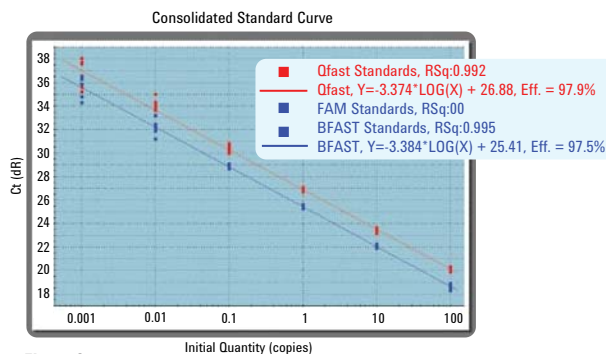


Figure 2
Brilliant II FAST master mix delivers better sensitivity over a wide range of concentrations
Standard Curve for Brilliant® II FAST (#600845) and QIAGEN QuantiFast Master Mix on a Gus 7 "Assay on Demand" gene target across five 10-fold dilutions with eight replicates at each concentration run on the Mx3005P. The Brilliant II master mix generates Ct values ~2 cycles earlier (represents more than a 10-fold difference in detection) than the QIAGEN master.

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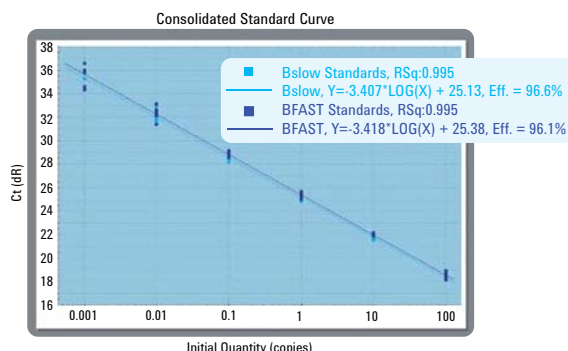


Figure 3
Brilliant II FAST master mix delivers the same sensitivity as Brilliant II over a wide range of concentrations
 Standard Curve for Brilliant II FAST (#600845) and Brilliant II QPCR Master Mix on a Gus 7 "Assay on Demand" gene target across five 10-fold dilutions with eight replicates at each concentration run on the Mx3005P. The Brilliant II FAST master mix generates Ct values equal to that of the standard Brilliant II master mix.



For more information regarding our Brilliant II QPCR and QRT-PCR master mix kits, please visit www.stratagene.com/brilliant2.

For the best sensitivity and performance, choose our next generation Brilliant II QPCR or QRT-PCR reagents.

Stratagene Brilliant II PCR Reagents	Quantity	Part Nos.
Brilliant II QPCR Master Mix	400 rxns	600804
Brilliant II QPCR Master Mix (10 pack)	4000 rxns	600815
Brilliant II QRT-PCR Master Mix, 1-step	400 rxns	600809
Brilliant II QRT-PCR Master Mix, 1-step (10 pack)	4000 rxns	600818
Brilliant II QRT-PCR Core Reagent Kit, 1-step	400 rxns	600810
Brilliant II QRT-PCR Core Reagent Kit, 1-step (10 pack)	4000 rxns	600819
Brilliant II QRT-PCR AffinityScript Master Mix, 2-step	400 rxns	600827
Brilliant II QPCR Low ROX Master Mix	400 rxns	600806
Brilliant II QPCR Low ROX Master Mix (10 pack)	4000 rxns	600817
Brilliant II QPCR High ROX Master Mix	400 rxns	600805
Brilliant II QPCR High ROX Master Mix (10 pack)	4000 rxns	600816
Brilliant II QRT-PCR Low ROX Master Mix, 1-step	400 rxns	600837
Brilliant II QRT-PCR Low ROX Master Mix, 1-step (10 pack)	4000 rxns	600841
Brilliant II QRT-PCR High ROX Master Mix, 1-step	400 rxns	600838
Brilliant II QRT-PCR High ROX Master Mix, 1-step (10 pack)	4000 rxns	600842
Brilliant II SYBR® Green QPCR Master Mix	400 rxns	600828
Brilliant II SYBR® Green QPCR Master Mix (10 pack)	4000 rxns	600831
Brilliant II SYBR® QPCR Low ROX Master Mix	400 rxns	600830
Brilliant II SYBR® QPCR High ROX Master Mix	400 rxns	600829
Brilliant II SYBR® QPCR High ROX Master Mix (10 pack)	4000 rxns	600832
Brilliant II SYBR® QPCR Low ROX Master Mix (10 pack)	4000 rxns	600833
Brilliant II SYBR® Green QRT-PCR Master Mix, 1-step	400 rxns	600825
Brilliant II SYBR® Green QRT-PCR Master Mix, 1-step (10 pack)	4000 rxns	600826
Brilliant II SYBR® Green QRT-PCR AffinityScript Master Mix, 2-step	400 rxns	600834
Brilliant II QRT-PCR SYBR Low ROX Master Mix, 1-step	400 rxns	600835
Brilliant II QRT-PCR SYBR High ROX Master Mix, 1-step	400 rxns	600836
Brilliant II QRT-PCR SYBR Low ROX Master Mix, 1-step (10 pack)	4000 rxns	600839
Brilliant II QRT-PCR SYBR High ROX Master Mix, 1-step (10 pack)	4000 rxns	600840
Brilliant II Fast SYBR® Green QPCR Master Mix	400 rxns	600843
Brilliant II Fast SYBR® Green QPCR Master Mix (10 pack)	4000 rxns	600844
Brilliant II Fast QPCR Master Mix 400	400 rxns	600845
Brilliant II Fast QPCR Master Mix (10 pack)	4000 rxns	600846

Ordering Information

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