

# Expand Your qPCR Research With Confidence!

# Data Sheet

Agilent Technologies and Integrated DNA Technologies have teamed up to provide a complete and validated qPCR solution.

#### Brilliant II qPCR and qRT-PCR Master Mixes

- Maximum sensitivity of detection
- · Accurate quantification even at low target concentrations
- Greater reproducibility within a single assay, across multiple assays, and across different templates

### Brilliant III Ultra-Fast qPCR and qRT-PCR Master Mixes

- · Ultra-fast cycling times without compromising accuracy
- Improved reproducibility and minimized non-specific amplification
  products

## PrimeTime® qPCR Assays

- Two primers and a hydrolysis probe combined in a single tube for ease of use
- · Choose from three different scales to best fit your research needs
- Select the reporter/quencher combination and primer/probe ratio for flexibility or multiplexing
- Rapid shipment in two to four business days
- New Double-Quenched Probes<sup>™</sup>, available only at IDT, have both lower background and higher signal than traditional probes

Agilent and Integrated DNA Technologies (IDT) are working together to deliver an integrated reagent and assay solution validated to generate accurate and reproducible results across a wide range of targets and applications.

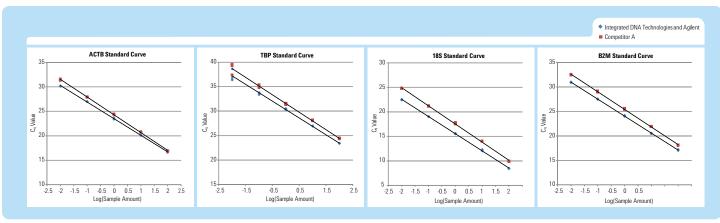
The combination of Brilliant Master Mixes from Agilent and PrimeTime® qPCR Assays from IDT provides:

- Lower Cq Values
- Better qPCR Efficiency
- Greater Flexibility

The combination of Brilliant II master mixes and PrimeTime<sup>®</sup> qPCR Assays leads to greater qPCR sensitivity of detection and accuracy. With this combination,  $C_q$  values are consistently lower than competitor assays (Figure 1, page 2). The Agilent qPCR reagents and IDT assays generate higher amplification efficiency across four orders of magnitude compared to the competitor reagents (Figure 2, page 2).

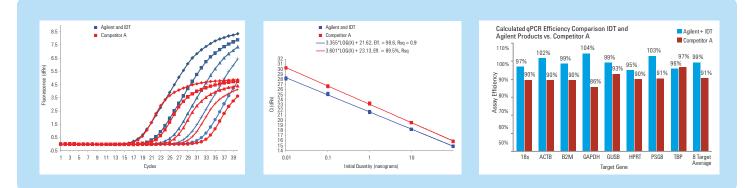






#### Figure 1.

PrimeTime® qPCR Assays with Brilliant II Master Mix were compared to Competitor A master mix and pre-designed assays across a 10-fold cDNA dilution series (prepared with AffinityScript cDNA Synthesis Kit on Human Universal Reference RNA from Agilent) from 100 ng to 0.1 ng run on the ABI 7900HT system under standard cycling conditions. Data illustrate Brilliant II and PrimeTime® qPCR assays generate C<sub>q</sub> values 1-2 cycles earlier than the competition, particularly at lower input amounts.



#### Figure 2.

PrimeTime® qPCR Assays with Brilliant II Master Mix were compared to Competitor A master mix on the Agilent Mx3005P qPCR System (in same experimental design as described in Figure 1). Eight targets analyzed, B2M amplification plots and standard curve is shown along with efficiency comparison for all 8 assays. In the B2M assay the Agilent/IDT assay resulted in 1.5x higher fluorescence and detected each standard 1-2 Cq earlier than Competitor A. The standard curve efficiency values are higher for 7 of 8 Agilent/IDT assays and on average 8% higher. Note 5 of the 8 Competitor A assays are at or below 90% efficiency.

# Integrated DNA Technologies PrimeTime® qPCR Assays and Agilent Brilliant Reagents

- Improved Sensitivity
- Improved Efficiency
- Flexibility
- Affordability



Product Information	
Description	Reactions (20 µL)
Agilent Brilliant II qPCR Master Mix	500 and 5000
Agilent Brilliant II One-Step qRT-PCR Master Mix	500 and 5000
Agilent Brilliant III Ultra-Fast qPCR Master Mix	400 and 4000
Agilent Brilliant III Ultra-Fast One-Step qRT-PCR Master Mix	400 and 4000
IDT PrimeTime® qPCR Mini Assay	100
IDT PrimeTime <sup>®</sup> qPCR Standard Assay	500
IDT PrimeTime® qPCR XL Assay	2500

Visit www.agilent.com/genomics/IDT or www.idtdna.com/primetime to learn more and to order these products.

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PrimeTime<sup>®</sup> qPCR Assays is a registered trademark of Integrated DNA Technologies. Double-Quenched Probes<sup>™</sup> is a trademark of Integrated DNA Technologies. SYBR<sup>®</sup> is a registered trademark of Molecular Probes.

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