PrimeTime™ qPCR assays

Predesigned sequences or user defined custom assays for gene expression analysis

Flexible reporter options— choose from 5′ reporter and 3′ quencher dye combinations

Lower background— multiplex confidently using double-quenched probes

Sequence transparency— know the complete sequence for every primer and probe you order

GUARANTEED RESULTS

Predesigned and custom PrimeTime qPCR Assays are high performance 5′ nuclease probe (Figure 1) and intercalating dye assays designed to give exceptional gene expression results. Easily select from predesigned sequences for human, mouse, and rat. Predesigned sequences will achieve 90% efficiency or better, or we will replace with an alternative design free of charge. Custom assays are also available and may be created for any DNA sequence from your species of interest using our PrimerQuest™ Tool.

SUPERIOR PERFORMANCE

PrimeTime qPCR Probe Assays are available as ZEN or TAO Double-Quenched Probes, which dramatically reduce background signal as compared to single-quenched probes. Our PrimeTime Gene Expression Master Mix exhibits temperature tolerance for ambient shipping and benchtop stability (Figure 2).

Assays: Lower background, higher efficiency.

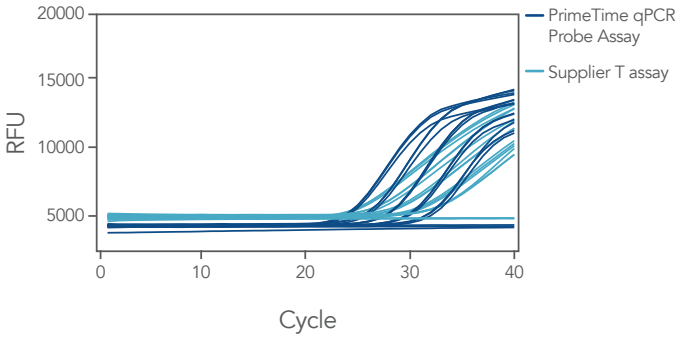

Figure 1. PrimeTime qPCR Probe Assays have lower background than Supplier T assays. PrimeTime qPCR Probe Assays were compared to equivalent Supplier T assays using five, 4-fold dilutions of cDNA template and PrimeTime Gene Expression Master Mix. Identical thresholds were set for all runs for comparison across assays. A comparison of Supplier T's assay and the equivalent PrimeTime qPCR Probe Assay are shown.

Master Mix: Exceptional thermal stability.

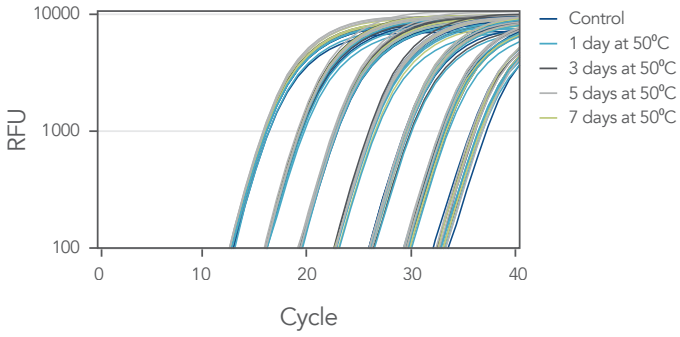

Figure 2. PrimeTime Gene Expression Master Mix provides efficient and consistent results, even after extended heat exposure. PrimeTime Master Mix was either incubated at 50°C for 1, 3, 5, or 7 days, or stored at –20°C until use (control). Results shown are amplification plots from *HPRT* assays with a 7-point standard curve. The PCR plates remained at room temperature for 24 hr before running on the thermal cycler.

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WIDE RANGE OF FLUORESCENT OPTIONS

Choose from a variety of reporter and quenchers dyes, including double-quenched probe options.

Table 1. Available 5′ fluorophore and quencher combinations for custom PrimeTime qPCR Probe Assays.
For a complete listing of dye and quencher combinations see www.idtdna.com/primetime.

5′ reporter dye	3′ quencher dye	Mini 100 reactions†	Standard 500 reactions†	XL 2500 reactions†
FAM	ZEN/Iowa Black FQ*	•	•	•
FAM	TAMRA	—	•	•
SUN™	ZEN/Iowa Black FQ	•	•	•
HEX	ZEN/Iowa Black FQ*	•	•	•
TET	ZEN/Iowa Black FQ*	—	•	•
Cy® 5	TAO/Iowa Black RQ*	•	—	—

* ZEN/Iowa Black FQ and TAO/Iowa Black RQ are double-quenched probes, which offer higher capability when compared to traditional single-quenched probes.

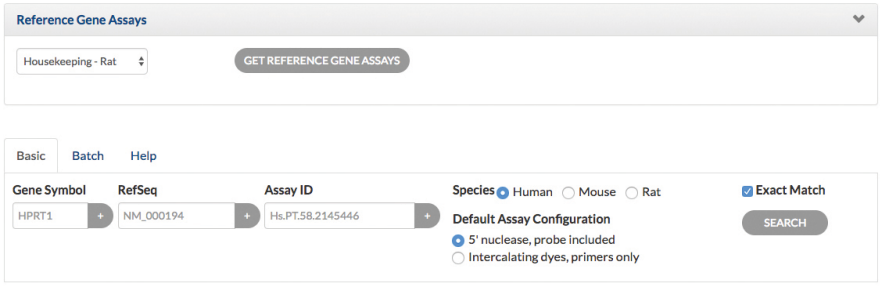
† Based on 20 µL reactions.

PrimeTime qPCR Primer Assays comprise a primer pair—designed by you—and are premixed for real-time PCR using intercalating dyes such as SYBR® Green (Life Technologies, Inc.), or EvaGreen® (Biotium) dyes (dyes not included). Primers are identical for a given assay making an easy transition from primer-only to probe-based assays.

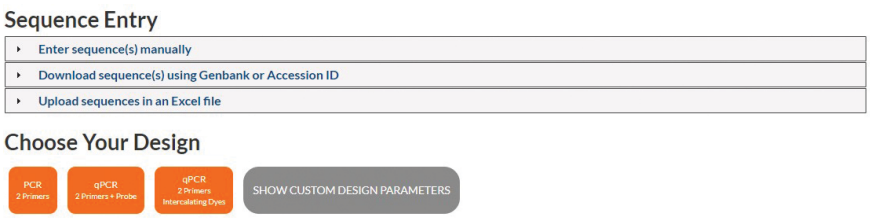
EASY ONLINE ORDERING TOOLS

Order any assay you need. Our predesigned database makes your selection easy for both probe-based and intercalating dye–based sequences for analysis of human, mouse, and rat transcriptomes. Custom assays may be designed for these, or any other species, using our PrimerQuest Tool.

Predesigned qPCR Assays



Design a custom assay: PrimerQuest Tool



- Choose sequences targeting human, mouse, or rat transcripts
- Select sequences for identifying splice variants
- Easily include sequences for housekeeping genes
- Create assays for your species of interest
- Design assays suitable for your thermodynamic and reaction conditions
- Choose from preloaded design parameters for PCR and qPCR
- Simultaneously (batch) design assays targeting up to 50 sequences

> FOR ORDERING INFORMATION, VISIT **WWW.IDTDNA.COM/PRIMETIME**

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