Product: PrimeTime™ Gene Expr Master Mix, 25 mL

Product number: 1055771

Kit batch number: 0000512412

Master mix lot number: 0000512068

Expiration date: 2022-MAR-19

Reference dye lot number: 0000498726

Expiration date: 2022-NOV-18

Test	Specification	Results
Functional testing* Master mix is tested in singleplex and duplex assays using nucleic acid templates.		
Singleplex efficiency	90–110%	Pass
Singleplex R^2	>0.990	Pass
Duplex efficiency	90–110%	Pass
Duplex R^2	>0.990	Pass
C_q difference singleplex vs. duplex	C_q difference ≤0.50	Pass
Antibody-mediated *Taq* polymerase inactivation†	<5% increased fluorescence over 10 min at 60°C	Pass
Analytical testing		
pH	8.40 ±0.10 pH units	Pass
dNTP concentration	3.2 ±0.4 mM	Pass
RNase contamination‡	<1 ng/mL RNase A <12.5 ng/mL RNase T1 <70 ng/mL RNase I	Pass
DNase contamination§	<2 U/µL	Pass
ss exonuclease activity	90–110% normalized fluorescence at 24 hrs	Pass
ds exonuclease activity	90–110% normalized fluorescence at 24 hrs	Pass
***E. coli* DNA contamination**	≤10 copies/µL	Pass

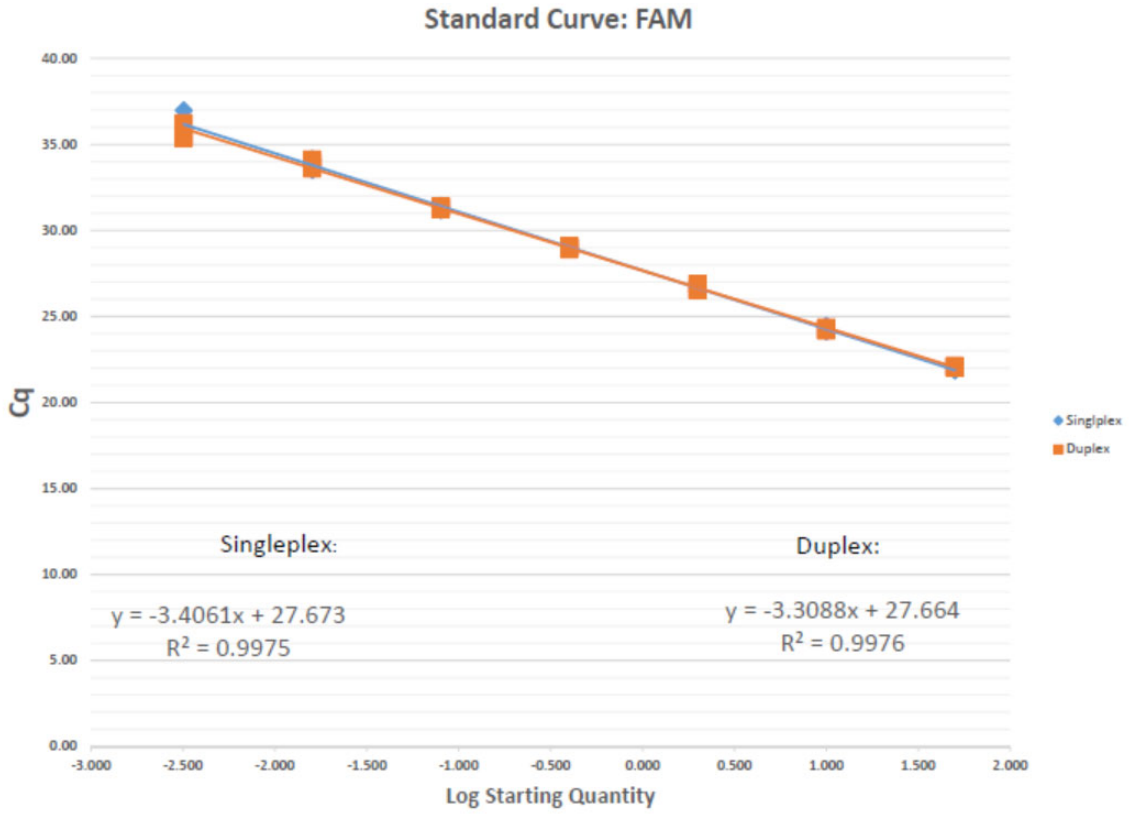
* Functional testing: efficiency and R^2 determined through evaluation of serial dilutions of cDNA template (50–0.0032 ng cDNA per rxn) using PrimeTime Assays (one FAM-ZEN and one HEX-ZEN assay) in both singleplex and duplex reactions using cycling conditions of 3 min. 95°C, 45 x (5 sec. 95°C, 30 sec. 60°C).

† Polymerase inhibition: measured by incubation of FAM-labeled substrate with master mix for 10 min at 60°C.

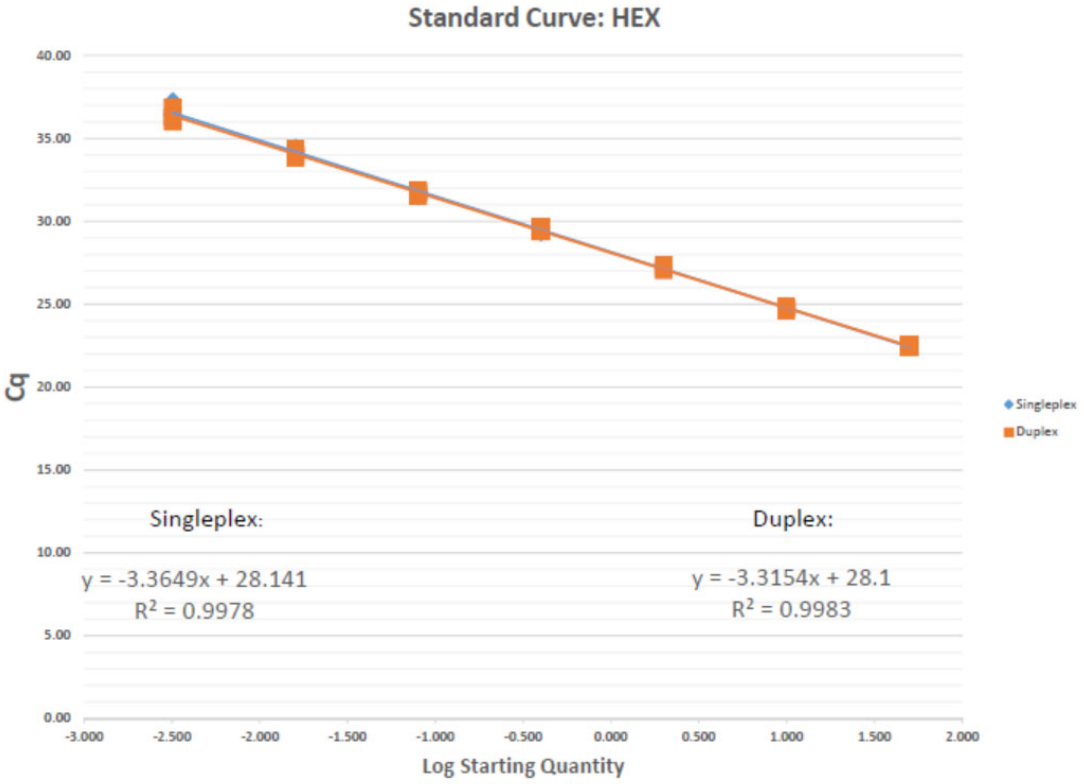
‡ RNase contamination: measured using IDT RNaseAlert® reagents.

§ DNase contamination: measured using IDT DNaseAlert reagents.

Standard curve (FAM-ZEN–based assay) – singleplex and duplex



Standard curve (HEX-ZEN–based assay) – singleplex and duplex



Storage: Store PrimeTime Gene Expression Master Mix in a sealed container at –20°C. Store Reference Dye in a sealed container at –20°C.

Verified by: Ekaterina Carlson
Quality release date: 2020-APR-01

IDT verifies that the information contained herein is true and correct to the best of our knowledge. This document was produced electronically and is valid without signature.

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