

Product: PrimeTime Gene Expression Master Mix, 500 mL

Product number: 1072102

Kit batch number: 0000494588

Master mix lot number: 0000490697

Expiration date: 2021-DEC-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 <i>Taq</i> polymerase inactivation†	<5% increase in 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
<i>E. coli</i> DNA contamination	≤10 copies/μL	Pass

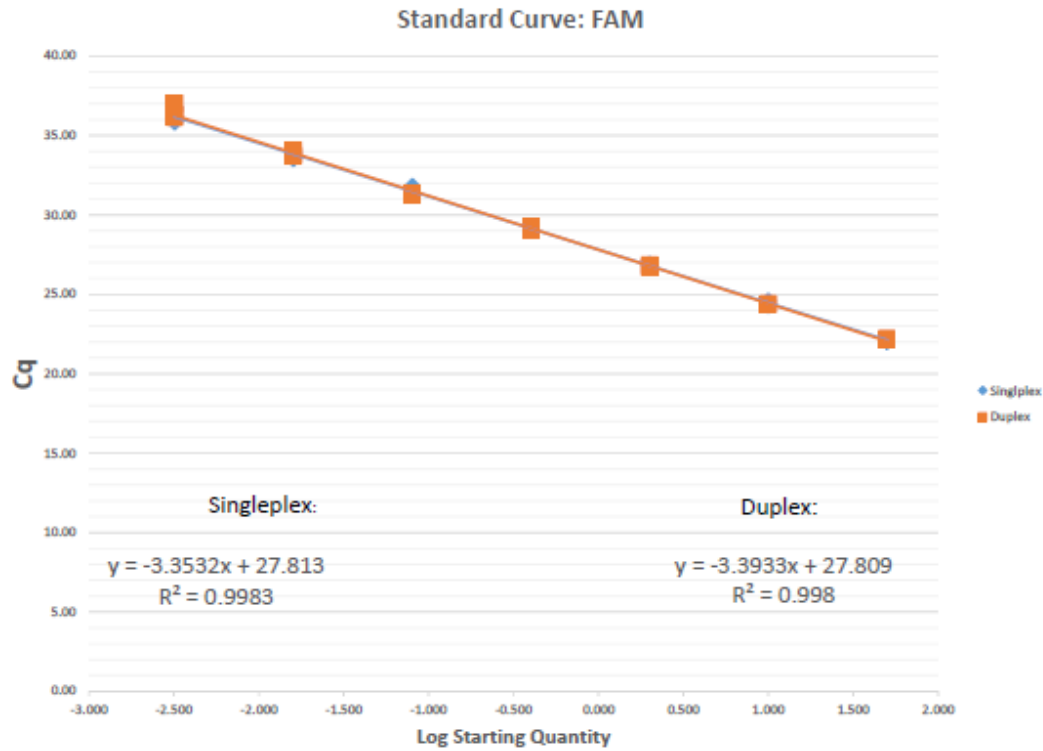
* Functional testing: efficiency and R² determined through evaluation of serial dilutions of cDNA template (50–0.0032 ng cDNA per rxn) using PrimeTime Assays (one FAM-ZEN and one HEX-ZEN assay) in both singleplex and duplex reactions using cycling conditions of 3 min. 95°C, 45 x (5 sec. 95°C, 30 sec. 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.

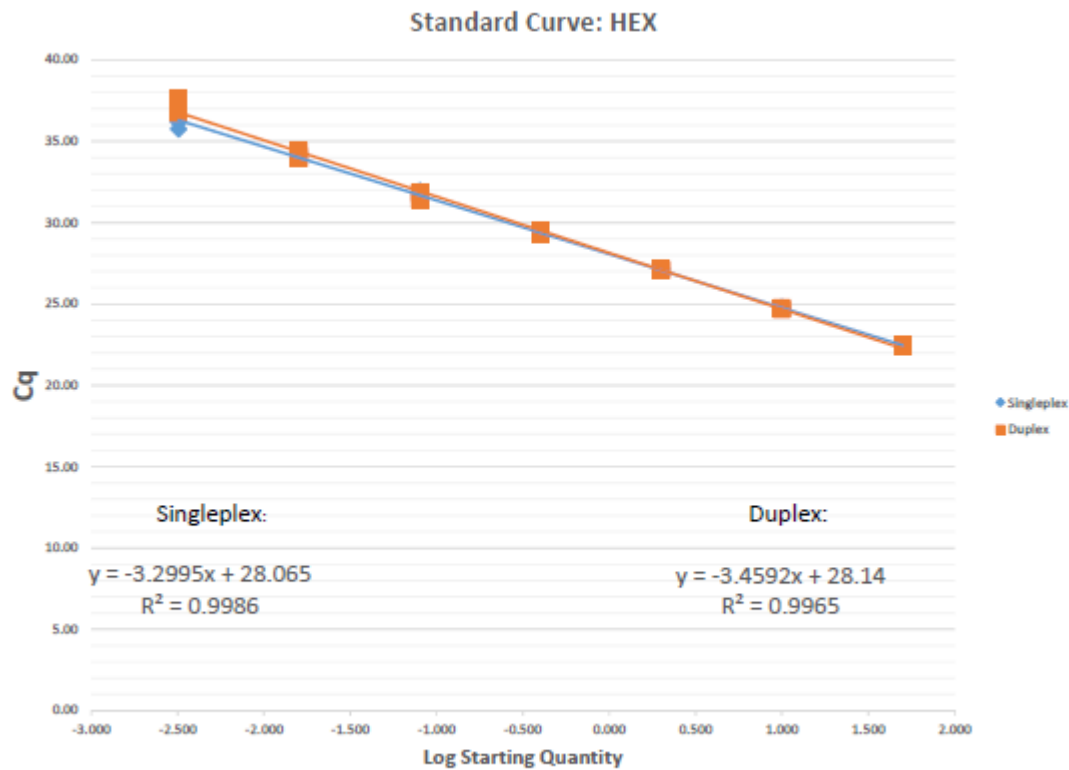
§ DNase contamination: measured using IDT DNaseAlert reagents.

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



CQC-415A REV04

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



CQC-415A REV04

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

Verified by: Jacob Petrzalka

Quality release date: 2020-JAN-13

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.

PrimeTime, ZEN, DNaseAlert, and IDT are trademarks of Integrated DNA Technologies, Inc. RNaseAlert is a trademark of Life Technologies.