

Product: Stemcell Master Mix Aliquot

Product number: 1081333

Kit batch number: 0000456178

Master mix lot number: 0000455000

Master mix expiration date: 2021-JUN-20

Test	Specification	Results
Functional testing*		
Master mix is tested in singleplex and duplex assays using nucleic acid templates.		
Singleplex efficiency	90–110%	Pass
Singleplex R²	>0.99	Pass
Duplex efficiency	90–110%	Pass
Duplex R²	>0.99	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	3.20 ±0.40 mM	Pass
RNase contamination[‡]	<1 ng/mL RNase A <12.50 ng/mL RNase T1 <70 ng/mL RNase I	Pass
DNase contamination[§]	<2 U/μL	Pass
Polymerase testing		
Testing completed on the DNA polymerase included in the master mix.		
ss exonuclease activity	50 U <10%	Pass
ds exonuclease activity	50 U <10%	Pass
<i>E. coli</i> DNA contamination	50 U <10 copies	Pass

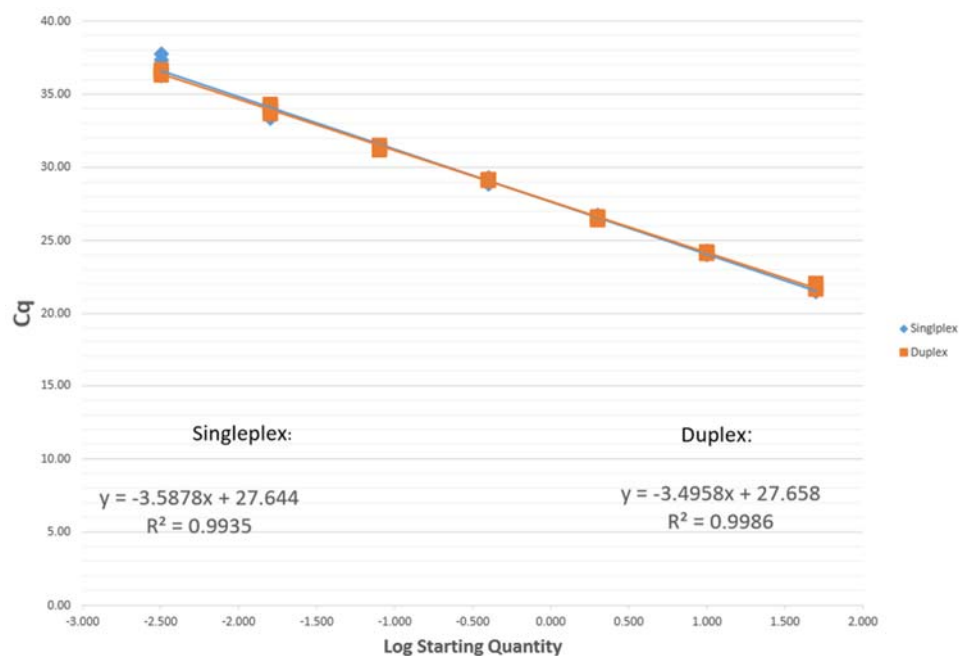
* Functional testing: efficiency and R² determined through evaluation of serial dilutions of cDNA template (50–0.0032 ng cDNA per rxn) using PrimeTime Assays (one FAM-ZEN and one HEX-ZEN assay) in both singleplex and duplex reactions using cycling conditions of 3 min. 95°C, 45 x (5 sec. 95°C, 30 sec. 60°C).

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

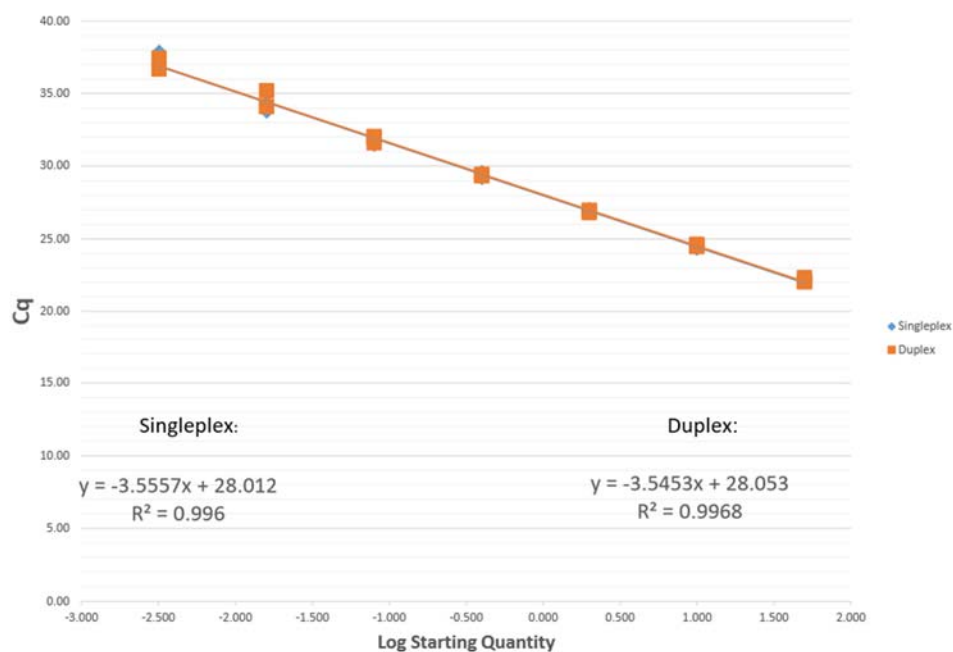
‡ RNase contamination: measured using IDT RNaseAlert[®] reagents.

§ DNase contamination: measured using IDT DNaseAlert reagents.

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



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



Storage: Store Stemcell Master Mix Aliquot in a sealed container at -20°C .

Verified by: Natalie Walter

Quality release date: 2019-JUL-17

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