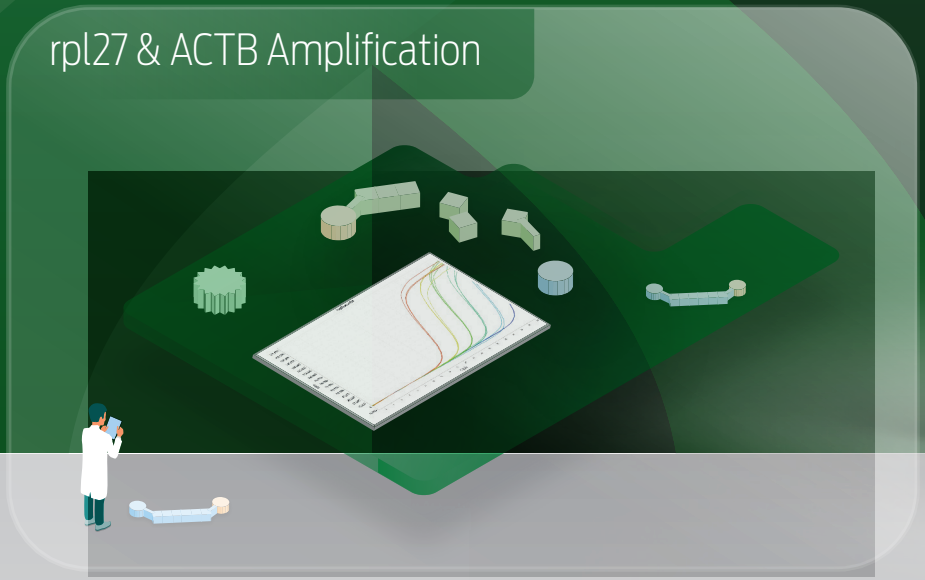
Benchmark Analysis

NZYSupreme qPCR Probe Master Mix

Product No MB416



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MKT-001_V10/2021

Amplification of rpl27 from mouse cDNA

NZYSupreme qPCR Probe Master Mix

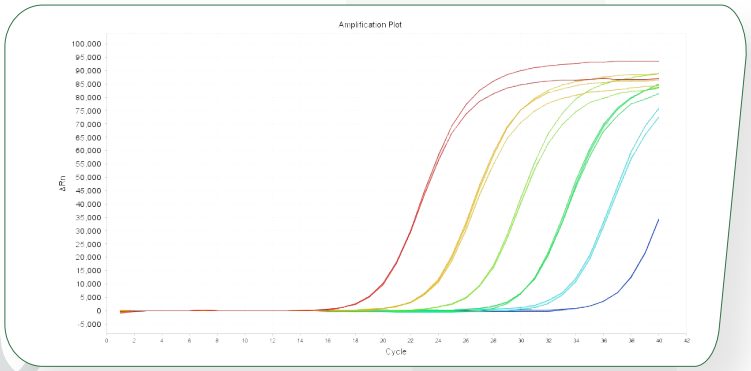
Optimized and highly efficient reaction mixture developed for real-time PCR. This master mix was engineered with a dual hot-start enzyme control mechanism to provide the highest detection sensitivity.

DUAL-HOT-START MODE

qPCR

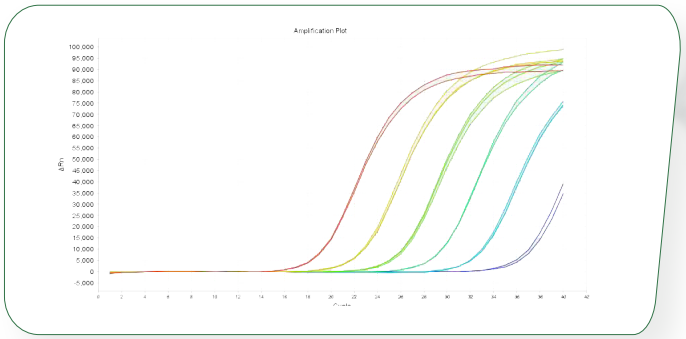
Probe Detection Technology

NZYTech | #MB416

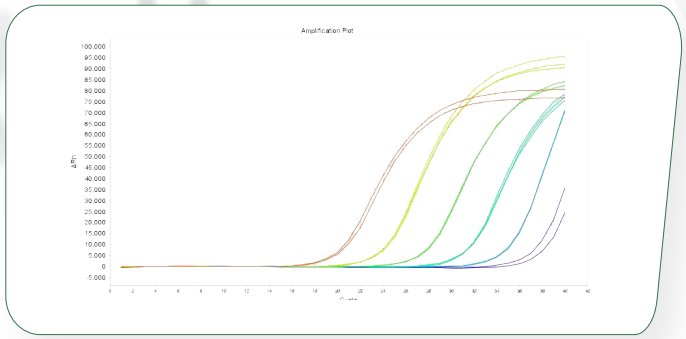


Competitor Benchmark

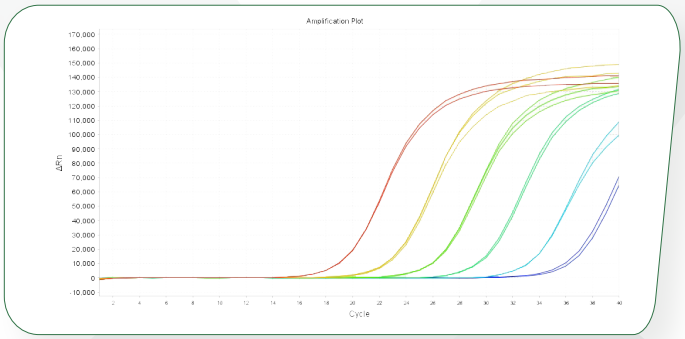
Competitor AB



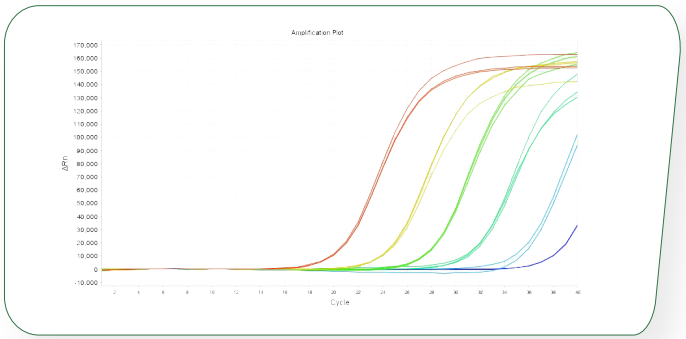
Competitor B



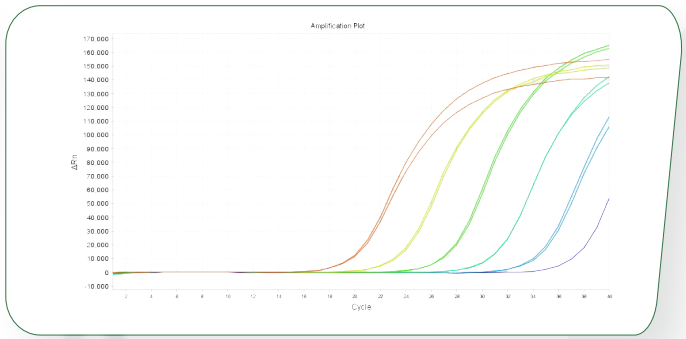
Competitor N



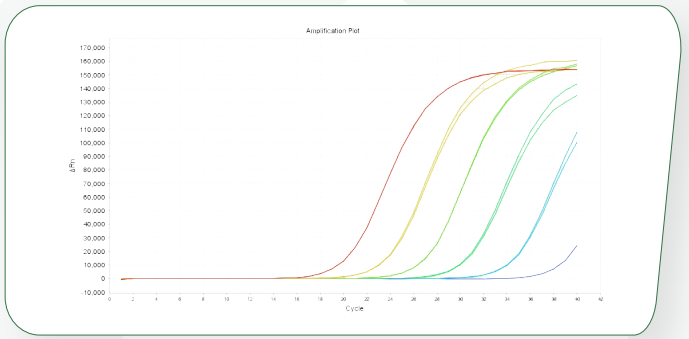
Competitor PB



Competitor P

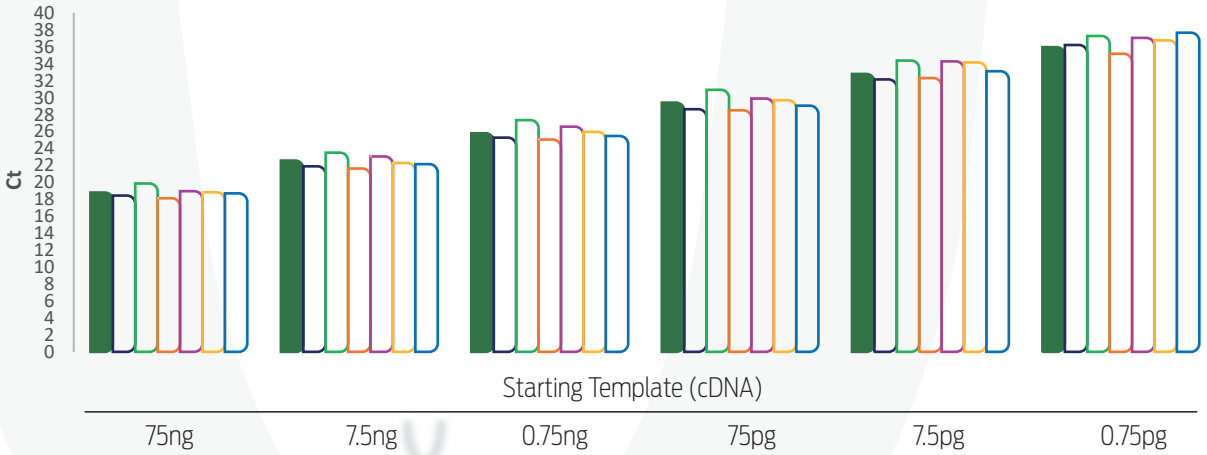


Competitor Q



Comparison of Ct Values

When comparing **NZYSupreme qPCR Probe Master Mix** with a mix from another supplier we strongly recommend amplifying from a 10-fold template dilution series. Loss of detection at low template concentration is the only direct measurement of sensitivity. An early Ct value is not an indication of good sensitivity, but rather an indication of speed.



	Starting Template (cDNA)					
	75ng	7.5ng	0.75ng	75pg	7.5pg	0.75pg
NZYTech	18,8	22,6	25,8	29,4	32,8	36,0
Competitor AB	18,4	21,9	25,3	28,7	32,2	36,2
Competitor B	19,9	23,5	27,4	31,0	34,4	37,3
Competitor N	18,1	21,7	25,1	28,5	32,3	35,2
Competitor PB	19,0	23,1	26,6	29,9	34,3	37,1
Competitor P	18,9	22,3	26,0	29,7	34,2	36,8
Competitor Q	18,7	22,2	25,5	29,1	33,1	37,7

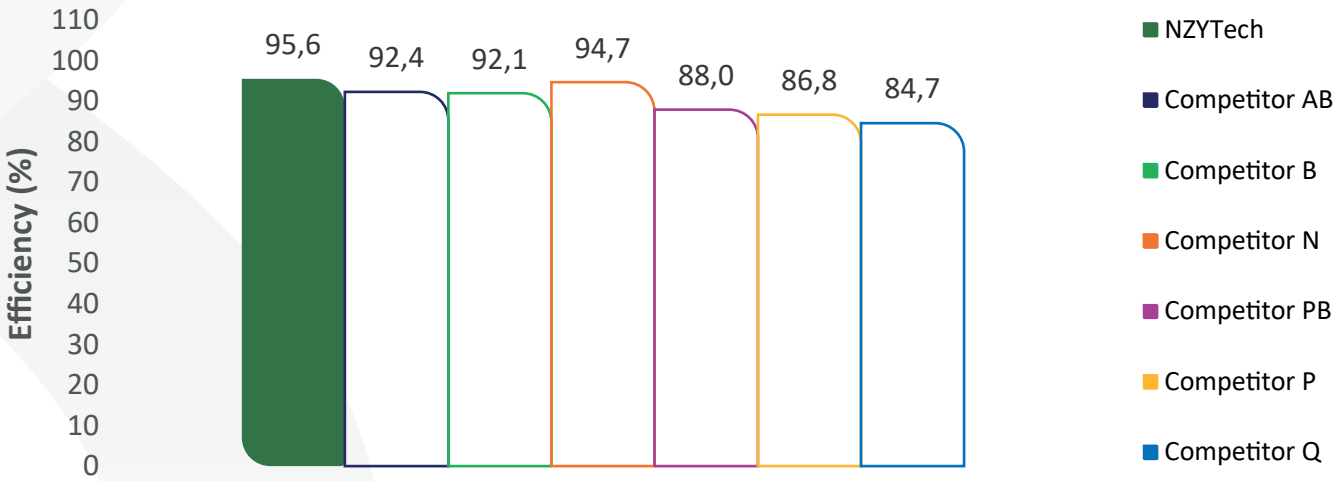
Designed for exceptional Efficiency

NZYSupreme qPCR Probe Master Mix is an ultra-sensitive master mix, compatible with common real-time platforms.

Benchmarked against a total of 6 competitor master mixes considered to be the gold-standard in qPCR Master Mixes, the **NZYSupreme qPCR Probe Master Mix** proved to be a formidable product with first-class efficiency.

Comparison of Efficiencies

A 10-fold serial dilution of cDNA reverse transcribed from total mouse liver was used as template for a real-time qPCR experiment to detect the rpl27 housekeeping gene



Amplification of ACTB (β-actin) from human gDNA

NZYSupreme qPCR Probe Master Mix

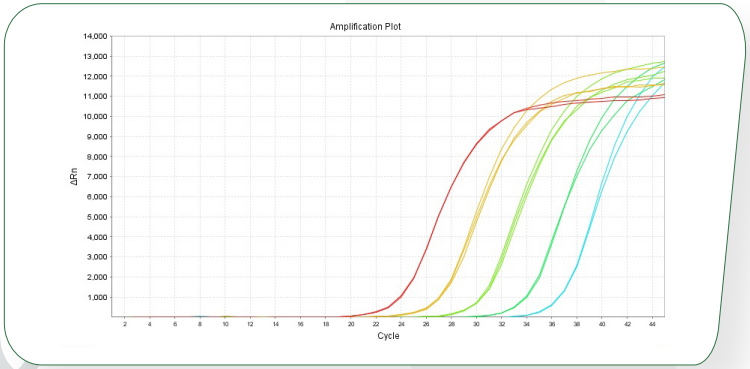
This optimized and highly efficient reaction mixture is provided as a simple-to-use, stabilized 2x reaction mixture that includes all components for quantitative PCR, except sample DNA, primers, probe and water.

VALIDATED ON WIDELY USED qPCR INSTRUMENTS

Ultra-Sensitive

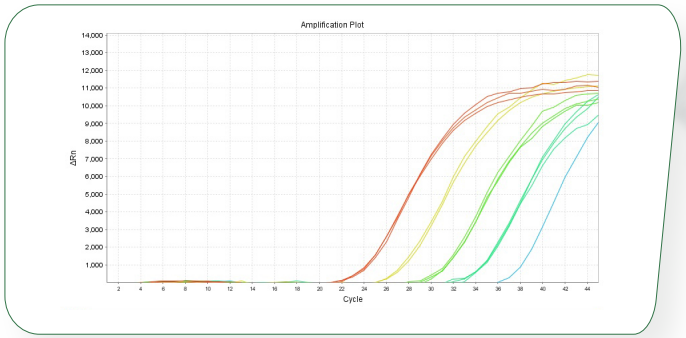
Batch-to-batch reproducibility

NZYTech | #MB416

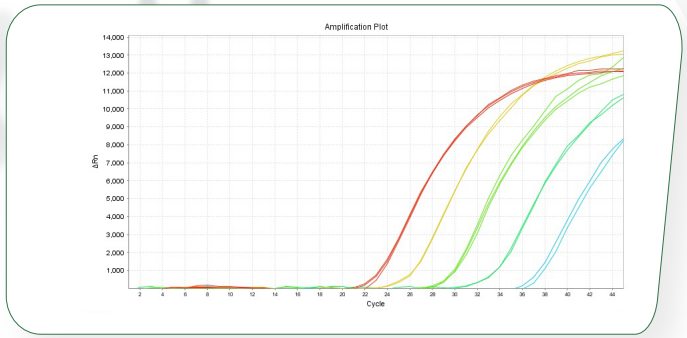


Competitor Benchmark

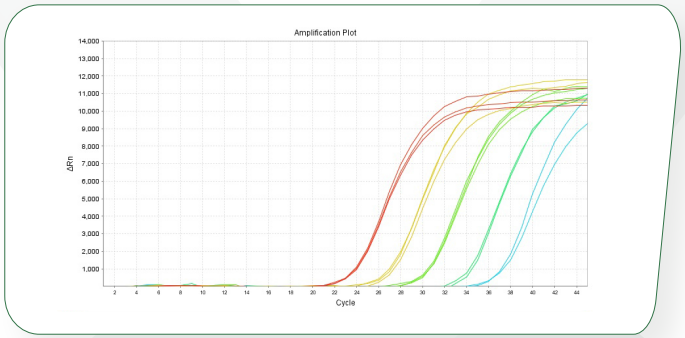
Competitor AB



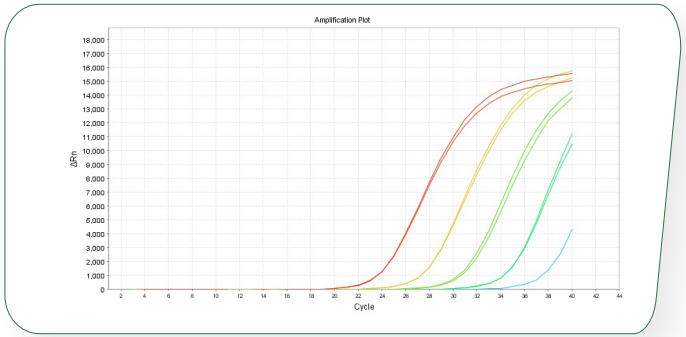
Competitor B



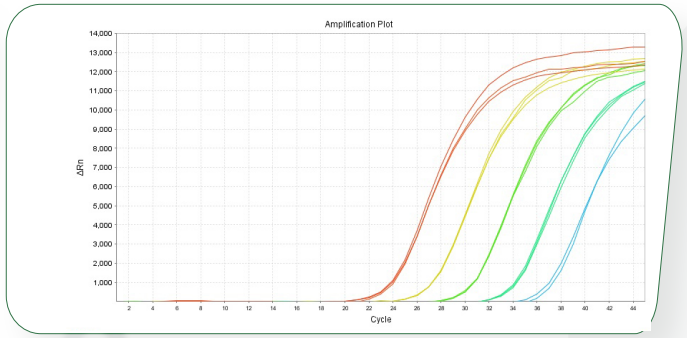
Competitor N



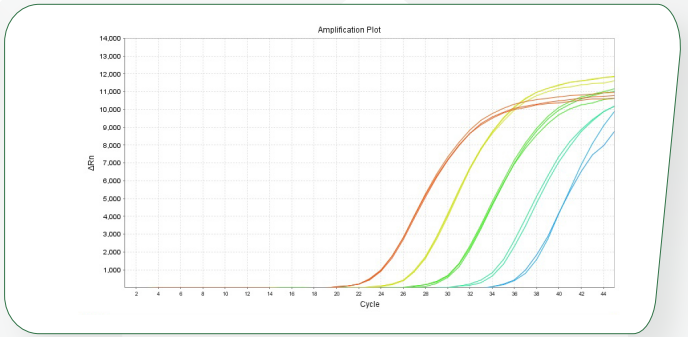
Competitor PB



Competitor P



Competitor Q



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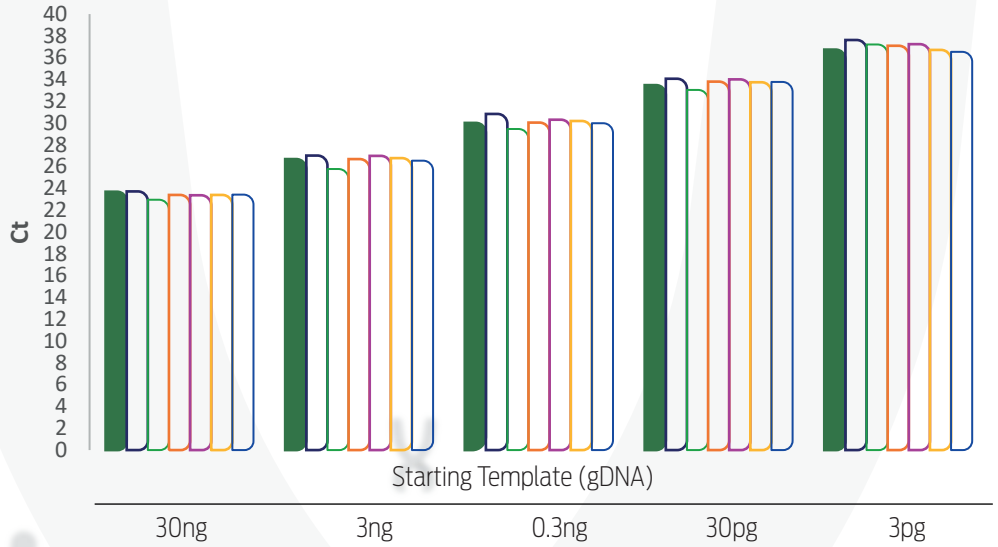

	Starting Template (gDNA)				
	30ng	3ng	0.3ng	30pg	3pg
NZYTech	23,7	26,7	30,0	33,5	36,7
Competitor AB	23,7	27,0	30,8	34,1	37,6
Competitor B	23,0	25,8	29,5	33,0	37,2
Competitor N	23,4	26,7	30,1	33,8	37,1
Competitor PB	23,4	27,0	30,3	34,0	37,3
Competitor P	23,4	26,8	30,2	33,7	36,7
Competitor Q	23,4	26,6	30,0	33,8	36,5

Compatible with multiple real-time PCR instruments

The master mix is compatible with real-time PCR instruments that do not require a passive reference signal for data normalization.

Formulations with diferent quantities of passive dye are also available (Catalogue Number MB438 and MB439).

Comparison of Efficiencies

A 10-fold serial dilution of human genomic DNA was used as template for a real-time qPCR experiment to detect the ACTB (β-actin) housekeeping gene