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New to MedStore: SuperScript Mix Formats

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SKU	Product Description	MedStore Price
11755050	SUPERSCRIPT VILO MASTERMIX	$268.90
11755250	SUPERSCRIPT VILO MASTERMIX	$1,032.78
11756050	**NEW!** SUPERSCRIPT IV VILO MASTERMIX	$307.08
11766050	**NEW!** SUPERSCRIPT IV VILO MASTERMIX W/ EZDNASE	$330.96
11766500	**NEW!** SUPERSCRIPT IV VILO MASTERMIX W/ EZDNASE	$2,399.49

If you have any questions, please contact:

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ThermoFisher SCIENTIFIC

SuperScript IV VILO Master Mix

Invitrogen™ SuperScript™ IV VILO™ Master Mix is a cDNA reaction master mix designed for two-step quantitative reverse transcription PCR (RT-qPCR). It elevates the trusted VILO™ technology to the next level with the use of the new highly processive and thermostable Invitrogen™ SuperScript™ IV Reverse Transcriptase (RT) enzyme, which allows cDNA reaction to occur at higher temperatures and in less time. The SuperScript IV RT gives the highest cDNA yields and sensitivity even with suboptimal purity or scarce templates. With the SuperScript IV VILO Master Mix, the RT-qPCR workflow is further accelerated with the extremely fast and simple gDNA removal approach. It dramatically reduces the reverse transcription protocol time and reduces variation related to possible RNA loss or damage during the conventional DNase step. SuperScript IV VILO Master Mix is your new tool to enable more efficient and reproducible RT-qPCR.

Sensitivity and perfect linearity in a 10-minute reaction

The high processivity of SuperScript IV RT enzyme in SuperScript IV VILO Master Mix allows completion of RT reaction in 10 minutes. In this short reaction time, the master mix is capable of generating higher cDNA yields compared to those obtained by lengthier competitor protocols (Figure 1)—keeping the perfect linearity typical for VILO™ products (Figure 2). We compared several different cDNA synthesis kits in fourteen different RT-qPCR assays using low starting-RNA input and found SuperScript IV VILO Master Mix produced highest efficiency results. Compared with other competitors, SuperScript IV VILO stently lowered C_t values by >2 cycles

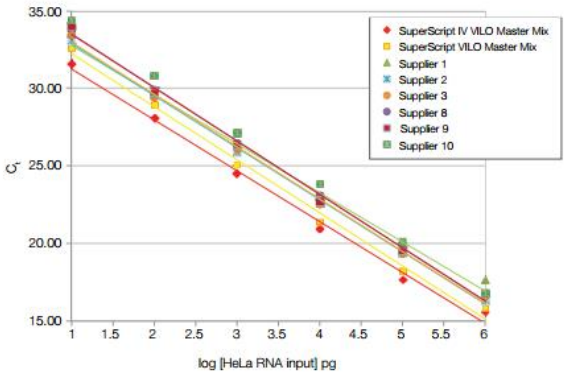

Figure 2. Perfect linearity and lower C_t value with SuperScript IV VILO Master Mix. SuperScript IV VILO Master Mix compared by RT-qPCR with seven commercial master mixes using 5 orders of magnitude (10 pg–1 µg) of total HeLa RNA input in 20 µL RT reactions. Linearity for Applied Biosystems™ TaqMan™ GAPDH target shown in graph corresponds to slope and R^2 calculated from C_t values for each formulation as determined by qPCR in 10 µL reactions using EXPRESS qPCR SuperMix (SuperScript IV VILO Master Mix efficiency = 102.1%, slope = -3.3, and R^2 = 0.99).

Facts

- Super fast—RT reaction in 10 minutes and gDNA removal in 2 minutes
- Super high yield—over 2 cycles of lowered C_t values ahead of all other reverse transcription reagents
- Super convenient one-tube reaction master mix for 2-step RT-qPCR
- Super sensitive even with low template amounts and suboptimal purity samples

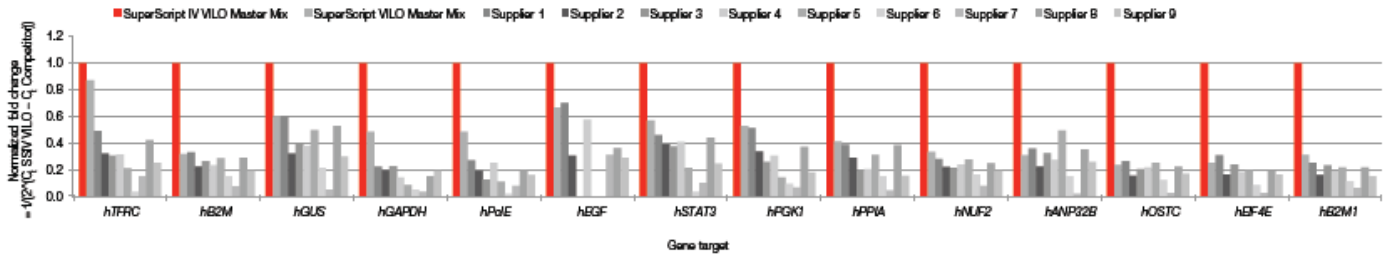

Figure 1. Highest sensitivity with SuperScript IV VILO Master Mix across 14 TaqMan gene targets. RT efficiency of SuperScript IV VILO Master Mix compared with ten commercial first strand cDNA synthesis master mixes by RT-qPCR. Master mixes were used to synthesize cDNA in 20 µL RT reactions, per manufacturer instructions, using 1 ng of total HeLa RNA input. For qPCR, 1 µL of RT reactions was used in 10 µL Invitrogen™ EXPRESS qPCR SuperMix (Cat. No. 11785200) reactions with Applied Biosystems™ TaqMan™ primer and/or probes for gene targets indicated. qPCR results are shown normalized to fold change relative to SuperScript IV VILO Master Mix [=1/(2^(C_t SSIV VILO – C_t Competitor))].