

Product Information	
Custom Multiplex qPCR ToughMix UNG	
Part Number	CM0147-05K
Number of Reactions	5000 Reactions
Reaction Size	20 μ L
Storage Temperature	-25 $^{\circ}$ C to -15 $^{\circ}$ C
Lot Number	66154406
Reference Number	020820
Expiration Date	02/28/2023

Product Description:

A custom formulation of PerfeCTa Multiplex qPCR ToughMix with UNG.

Product Specifications				
CM0147				
Assay	Multiplex qPCR Functional Assay	High Biased, Multiplex qPCR	DNase	RNase
Result	Pass	Pass	Pass	Pass

Quality Control Analysis and Specifications:

Multiplex qPCR: 4-color multiplex qPCR is performed in triplicate reactions on 10-fold serial dilutions of an equal copy mixture of four plasmid DNAs (10 copies to 1 x10⁷ copies). Cq standard curve analysis for each targeted sequence must have a coefficient of determination (r^2) \geq 0.990 with a slope between -3.25 and -3.65. Control reactions lacking template DNA (NTC) must remain below fluorescence threshold through 45 PCR cycles.

High Biased, Multiplex qPCR: 4-color multiplex qPCR of a 10-fold serial dilution of a FAM probe specific plasmid DNA (1 x10⁷ copies to 10 copies) in a fixed background of 3 different plasmid targets at 1x10⁸ copies (each) must have an LOD of 10 copies. Cq standard curve analysis must have a coefficient of determination (r^2) \geq 0.990 with a slope between -3.25 and -3.70.

DNase: DNase activity must be below the detectable limits of 100 pg DNase I equivalent as assayed using a fluorogenic substrate following a 1 hour incubation at 37 $^{\circ}$ C with each kit component: 2X qScript RT, 1X qScript Reaction Mix, or nuclease-free water and control buffer.

RNase: RNase activity must be below the detectable limits of 1 pg RNase A equivalent as assayed using a fluorogenic substrate following a 1 hour incubation at 37 $^{\circ}$ C with each kit component: 2X qScript RT mix, 1X qScript Reaction Mix, or nuclease-free water and control buffer.

Limitations of Use

QuantaBio and Ultrplex are registered trademarks of QIAGEN Beverly, Inc. Quanta Biosciences, qScript, Geltrack, ToughMix, PerfeCTa, and Fastmix are registered trademarks of Quanta BioSciences Inc. Extracta, AccuStart, AccuMelt, and Accuvue are trademarks of Quanta BioSciences Inc. Applied Biosystems, StepOne, StepOnePlus and ROX are trademarks of Thermo Fisher Scientific and or its subsidiaries. Please contact QIAGEN-Beverly for more information.

This product was developed, manufactured, and sold for *in vitro* use only. The product is not suitable for administration to humans or animals. SDS sheets relevant to this product are available upon request.