Quantabio

Product Information					
PerfeC⊤a® qPCR ToughMix® UNG ROX™					
	95139-250	Part Number			
	250 Reactions	Number of Reactions			
	20µL	Reaction Size			
	-25ºC to -15ºC	Storage Temperature			
	027167	Lot Number			
120117		Reference Number			
	07/31/2020	Expiration Date			
	20μL -25°C to -15°C 027167 120117	Reaction Size Storage Temperature Lot Number Reference Number			

Product Description:

PerfeCta qPCR ToughMix UNG ROX is a 2X concentrated ready-to-use reaction cocktail for PCR amplification of DNA templates that relieves several types of PCR inhibition commonly encountered with crude extracts, environmental specimens, plant tissues, animal tissues, and complex food matrices. This robust real-time qPCR reagent provides maximum sensitivity and PCR efficiency with a variety of fluorogenic probe chemistries, including TaqMan® hydrolysis probes. The only user-supplied components are primers, probe(s), and DNA template. Pre-blended with inert AccuVue plate loading dye to help minimize pipette errors during setup and provides visual confirmation of thorough mixing. A key component of PerfeCTa qPCR ToughMix is an ultra pure, highly processive thermostable DNA polymerase that is combined with high avidity monoclonal antibodies. This proprietary polymerase mix is highly resistant to PCR inhibitors and provides an extremely

stringent automatic hot-start allowing reaction assembly, and temporary storage, at room temperature prior to PCR amplification. PerfeCTa qPCR ToughMix delivers exceptional performance with either fast or conventional PCR cycling protocols. UNG containing versions are blended with Uracil N-glycosylase to eliminate potential post-PCR carryover contamination associated with routine molecular testing.

<u>Component Part Numbers:</u> 84243 PerfeCта qPCR ToughMix, UNG ROX 1.25 mL

Product Specifications						
95139						
Assay	qPCR Plasmid DNA Functional Assay	qPCR Genomic DNA Functional Assay	DNase	RNase		
Result	Pass	Pass	Pass	Pass		

Quality Control Analysis and Specifications:

Nuclease Assay:

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°C with each kit component at 1X concentration. **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°C with each kit component at 1X concentration.

qPCR Plasmid DNA Functional Assay: Fast-cycling Real-time PCR detection of log-fold serial dilutions of a control DNA from 10 to 1×10^7 copies. Linear regression analysis of cycle threshold versus log input quantity must give a slope of between -3.20 and -3.65 and coefficient of determination (R^2) ≥ 0.990 .

qPCR Genomic DNA Functional Assay: Real-time PCR detection of single-copy gene in human genomic DNA using activation step of 10 minutes at 95°C. Linear regression analysis of cycle threshold versus log input quantity for a log-fold serial dilutions of human genomic DNA from 10 copies to 1×10^5 copies must give a slope of between -3.2 and -3.65 and coefficient of determination (R^2) \ge 0.990 with accurate discrimination of two fold discrimination of 500, 1000, 2000 copies.

Limitations of Use

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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. 100 Cummings Center, Suite 407J, Beverly, MA 01915 • Ph (888) 927-7027 • Fax (978) 867-5724 • www.QuantaBio.com FMWI016.2 Rev 01