Product Information Sheet

Product Name: 4X InhibiTaq™ PLUS HotStart qPCR MasterMix*

NOW PART OF FORTIS LIFE SCIENCES

Concentration:

InhibiTaq™ PLUS HotStart qPCR MasterMix: 4X

Storage and Handling:

Store at -20°C upon arrival until provided expiration date. Minimize Freeze Thaw to avoid loss of performance.

Product Description:

4X InhibiTaq™ PLUS HotStart qPCR MasterMix:

An enhanced performance MasterMix containing UDG Enzyme and dUTP to minimize the effects of carry over contamination. The MasterMix is a 4X ready-to-use MasterMix for quantitative real time evaluation of DNA using dye or fluorescent probe-based detection. InhibiTaq™ PLUS HotStart qPCR MasterMix contains a chemically modified Taq DNA polymerase that remains completely inactive at room temperature. The enzyme becomes activated after only 2 minutes at 95°C. Empirical's InhibiTaq™ PLUS HotStart qPCR MasterMix has been optimized for use with hydrolysis-based probes but is also suitable with other probe-based detection systems and dye-based detection.

Protocol:

The following reaction setup and general cycling conditions are recommended but can vary depending on the template and primers being used. The following set up is for a 20µl reaction size.

Reaction set-up for 20uL reaction volume Table 1:

Component	Volume	Final Concentration
4X InhibiTaq™ PLUS HotStart qPCR MasterMix	5 µl	1X
Target Specific Primers and Probe	1 µl	1X
DNA Template	X µl	100 ng to 1 pg
EvaGreen Dye, 20X in Water (if required, purchase separately)	1 µl	1X
ROX Reference Dye, 25µM (See Table 2, if required, purchase separately)	See Table 2	See Table 2
Nuclease Free Water to volume	X µl	N.A.
Total	20 µl	

Table 2: ROX concentration recommendation for different instrument

Type	Instrument		ROX final concentration
	Company	Instrument Name	
No ROX	Roche	LightCycler 480, LightCycler 2.0	None
	BioRad	iCycler, MyiQ, MiQ 2, iQ 5, CFX-96, CFX-384, Chromo4, MJ Opticon, Option2, MiniOpticon	
	Qiagen	Roto-Gene Q, Roto-Gene3000, Roto-Gene 6000	
	Illumina	Eco RealTime PCR System	
	Eppendorf	Mastercycler realplex	
	Cepheid	SmartCyler	
Low ROX	ABI	7500, 7500 Fast	30nM
	Stratagene	MX4000P, MX3000P, MX3005P	
High ROX	ABI	5700, 7000, 7300, 7700, 7900, 7900HT, 7900HT Fast, StepOne, StepOne plus, Viia7	300nM

***This product is intended for Research Use Only. This product is manufactured under ISO13485:2016 Quality System Requirements and is available for use as a Raw Material for use in IVD applications. Please contact Empirical Bioscience for further details.**

For SDS and Certificate of Analysis please visit www.Fortislife.com

Thermal cycling conditions:

Table 3: Recommended Cycling Conditions

Cycling Step	Stage	No. of Cycles	Temperature	Holding Time
UDG Incubation	1	1	25°C	2 minutes
Enzyme Activation	2	1	95°C	2 minutes
Amplification**	3	40	95°C	10 seconds
			60°C	60 seconds

**Temperature and Holding Time will be based off primer set used.

Notice to Purchaser:
SYBR® is a registered trademark of Invitrogen, Inc. EvaGreen® is a registered trademark of Biotium, Inc. Empirical Bioscience is licensed by Biotium, Inc. to sell reagents including EvaGreen® dye, for research purposes only. Use of this product is covered by the following US patents and foreign equivalents: US7,803,943 B2, US7,776, 567, B2, including any patent application from which any of the listed patents directly or indirectly matured, any divisional, continuation and continuation-in-part application of any of the foregoing patent applications.

***This product is intended for Research Use Only. This product is manufactured under ISO13485:2016 Quality System Requirements and is available for use as a Raw Material for use in IVD applications. Please contact Empirical Bioscience for further details.**