FORTIS LIFE SCIENCES

Product Information Sheet

Product Name: FlashTaq™ HotStart 2X MasterMix*

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Concentration:

FlashTaq™ HotStart MasterMix: 2X

Storage and Handling:

Upon arrival store at -20°C for provided expiration date, Room Temperature for up to 60 Days, 4°C for up to 120 days. Minimize Freeze thaw of MasterMix to avoid loss of performance.

Product Description:

FlashTaq™ HotStart 2X MasterMix:
Contains FlashTaq HotStart DNA Polymerase; a chemically modified HotStart Taq DNA polymerase. The FlashTaq™ HotStart 2X MasterMix remains inactive at room temperature until after a 2-minute activation at 95°C. The 2X MasterMix contains dCTP, dGTP, dATP, dTTP, $MgCl_2$, and FlashTaq™ HotStart DNA Polymerase. Taq DNA Polymerase gene is isolated from *Thermus aquaticus* YT1 and expressed in *E. coli*. Just add template and primers with the MasterMix and the reaction is ready to go.

Protocol:

The following reaction set up and general cycling conditions are recommended but can vary depending on the template and primers being used.

Reaction set-up for a 50uL Reaction:

Component	Volume	Final Concentration
FlashTaq™ HotStart 2X MasterMix	25 µl	1X
Upstream Primer, 10µM	0.5-5.0 µl	0.1-1.0µM
Downstream Primer, 10µM	0.5-5.0 µl	0.1-1.0µM
DNA Template	X µl	> 1ng
Nuclease Free Water to volume	50 µl	N.A.

Thermal cycling conditions: The following general cycling conditions are recommended but can vary depending on the template and primers being used.

Cycling Step	Temperature	Holding Time	Cycles
Initial Denaturation and FlashTaq™ HotStart Activation	95˚C	2min	1
Denaturation	94-96˚C	15 - 30sec	20-30
Annealing#	55-65˚C	15 - 60sec	
Extension	70-72˚C	1min/kb	
Final Extension	70-72˚C	0-10min	1

#Annealing will depend on primer length and composition. Generally, begin 5˚C below primer T_m.

***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