



Product Information Sheet

IBI Taq HotStart No Dye 2X Master Mix

Concentration: 2X

Storage: Store at -20°C upon arrival. Minimize number of freeze/thaw cycles by storing in working aliquots

<u>Catalog #</u>	<u>Size</u>
IB43110	10 Reactions
IB43111	100 Reactions
IB43112	500 Reactions
IB43113	1000 Reactions

Product Description: IBI Taq HotStart No Dye 2X Master Mix is a 2X ready-to-use master mix that contains IBI Taq HotStart DNA Polymerase; a chemically modified HotStart Taq DNA Polymerase with an activation time of 2 minutes at 94°C, 400µM dCTP, 400µM dGTP, 400µM dATP, 400µM dTTP, and 3mM MgCl₂. The Taq DNA Polymerase gene is isolated from *Thermus aquaticus* YT1 and expressed in E.coli. The recombinant Taq DNA Polymerase shows identical characteristics to native *Taq* from *Thermus aquaticus*.

IBI#	Description	Size
IB43110	IBI Taq HotStart No Dye 2X Master Mix (No Loading Dye Added)	10 RxNs
IB43111	IBI Taq HotStart No Dye 2X Master Mix (No Loading Dye Added)	100 RxNs
IB43112	IBI Taq HotStart No Dye 2X Master Mix (No Loading Dye Added)	500 RxNs
IB43113	IBI Taq HotStart No Dye 2X Master Mix (No Loading Dye Added)	1000 RxNs

Reagents to be supplied by end user: Nuclease-free Water, Template DNA, Downstream Primer, Upstream Primer.

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 50µl Reaction Volume

Component	Volume	Final Concentration
IBI Taq HotStart No Dye 2X Master Mix	25µl	1X
Upstream Primer, 10µM	0.5 – 5.0µl	0.1 – 1.0µM
Downstream Primer, 10µM	0.5 – 5.0µl	0.1 – 1.0µM
DNA Template	1 – 5µl	<250ng
Nuclease-free Water to:	50µl	N.A.

Thermal Cycling Conditions:

Cycling Step	Temperature	Holding Time	Cycles
Initial Denaturation	94°C	2min	1
Denaturation	94-96°C	30sec-4min	20-30
Annealing*	55-65°C	15-30sec	
Extension	70-72°C	30sec-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.

Quality Control: IBI Taq HotStart No Dye 2X Master Mix is tested and verified by Nuclease Assay, DNA Contamination Assay, and Activity (Functional) Assay. Complete results can be found on product C of A, available upon request.

Research Use Only. Not for Use in Diagnostic Procedures.

10/10/2014