

Product Information Sheet

Taq No Dye 2X Master Mix

 Catalog #
 Size

 IB43100
 10 Reactions

 IB43101
 100 Reactions

 IB43102
 500 Reactions

 IB43103
 1000 Reactions

Concentration: 2X

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

<u>Product Description</u>: IBI Taq No Dye 2X Master Mix is supplied in a 2X reaction buffer with 400μM dCTP, 400μM dGTP, 400μM dATP, 400μM dTTP, and 3mM MgCl₂, and IBI Taq DNA Polymerase. 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
IB43100	IBI Taq No Dye 2X Master Mix (No Loading Dye Added)	10 RxNs
IB43101	IBI Taq No Dye 2X Master Mix (No Loading Dye Added)	100 RxNs
IB43102	IBI Taq No Dye 2X Master Mix (No Loading Dye Added)	500 RxNs
IB43103	IBI Taq 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.

<u>Protocol:</u> 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 No Dye 2X Master Mix	25μ1	1X
Upstream Primer, 10μM	$0.5 - 5.0 \mu l$	$0.1 - 1.0 \mu M$
Downstream Primer, 10μM	$0.5 - 5.0 \mu l$	$0.1 - 1.0 \mu M$
DNA Template	1 – 5µl	<250ng
Nuclease-free Water to:	50μ1	N.A.

Thermal Cycling Conditions:

Cycling Step	Temperature	Holding Time	Cycles
Initial Denaturation	94 ⁰ C	2min	1
Denaturation	94-96 ⁰ C	30sec-4min	
Annealing*	55-65 ⁰ C	15-30sec	20-30
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 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.