



# Product Information Sheet

## IBI Taq KeenGreen 2X Master Mix

**Concentration:** 2X

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

**Product Description:** IBI Taq KeenGreen 2X Master Mix is supplied in a 2X reaction buffer with 400µM dCTP, 400µM dGTP, 400µM dATP, 400µM dTTP, and 3mM MgCl<sub>2</sub> 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*.

Catalog #	Size
IB43120	10 Reactions
IB43121	100 Reactions
IB43122	500 Reactions
IB43123	1000 Reactions

IBI's Taq KeenGreen 2X Master Mix contains loading dyes (~4Kb and <25bp) that make the monitoring process during electrophoresis easy, and a density agent that allows reactions to be loaded directly onto agarose gels. These dyes do not obscure visualization of reactions, as the bands run outside most products.

IBI#	Description	Size
IB43120	IBI Taq KeenGreen 2X Master Mix (Loading Dye Added)	10 RxNs
IB43121	IBI Taq KeenGreen 2X Master Mix (Loading Dye Added)	100 RxNs
IB43122	IBI Taq KeenGreen 2X Master Mix (Loading Dye Added)	500 RxNs
IB43123	IBI Taq KeenGreen 2X Master Mix (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 KeenGreen 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<sub>m</sub>.

**Quality Control:** IBI Taq KeenGreen 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.**