



[For research use only]

2X PCR reaction master mix

Ready-to-use mix	2X master mix (no dye)	2X master mix (with Cyan & orange dyes)	2X master mix (with blue & orange dyes)	2X master mix (with blue dye only)	2X master mix (with red and yellow dyes)
Key Enzyme	Hot-start Taq	Hot-start Taq	Hot-start Taq	Hot-start Taq	Hot-start Taq
Dye migration size	N/A	~3-4kb; ~50bp.	~350-400bp; ~50bp.	~350-400bp.	~500bp; ~10bp
Applications	<p>Allow quick set up of PCR reactions for high-throughput screening. Just add DNA template and primers, other PCR components have already been included and optimized for satisfactory results.</p> <ul style="list-style-type: none"> • Routine PCR (<6kb), • Genotyping (for mice, zebrafish, drosophila, sea urchins etc.), • Positive microbial colony screening, • Others. 	<p>Allow quick set up of PCR reactions for high-throughput screening. Just add DNA template and primers, other PCR components have already been included and optimized for satisfactory results.</p> <ul style="list-style-type: none"> • Routine PCR (<6kb), • Genotyping (for mice, zebrafish, drosophila, sea urchins etc.), • Positive microbial colony screening, • Others. 	<p>Allow quick set up of PCR reactions for high-throughput screening. Just add DNA template and primers, other PCR components have already been included and optimized for satisfactory results.</p> <ul style="list-style-type: none"> • Routine PCR (<6kb), • Genotyping (for mice, zebrafish, drosophila, sea urchins etc.), • Positive microbial colony screening, • Others. 	<p>Allow quick set up of PCR reactions for high-throughput screening. Just add DNA template and primers, other PCR components have already been included and optimized for satisfactory results.</p> <ul style="list-style-type: none"> • Routine PCR (<6kb), • Genotyping (for mice, zebrafish, drosophila, sea urchins etc.), • Positive microbial colony screening, • Others. 	<p>Allow quick set up of PCR reactions for high-throughput screening. Just add DNA template and primers, other PCR components have already been included and optimized for satisfactory results.</p> <ul style="list-style-type: none"> • Routine PCR (<6kb), • Genotyping (for mice, zebrafish, drosophila, sea urchins etc.), • Positive microbial colony screening, • Others.
Store @	-20°C, 7 months; +4°C, 4 weeks. Avoid frequent thaw-and-freeze.	-20°C, 7 months; +4°C, 4 weeks. Avoid frequent thaw-and-freeze.	-20°C, 7 months; +4°C, 4 weeks. Avoid frequent thaw-and-freeze.	-20°C, 7 months; +4°C, 4 weeks. Avoid frequent thaw-and-freeze.	-20°C, 7 months; +4°C, 4 weeks. Avoid frequent thaw-and-freeze.
Product size	1.25ml/vial	1.25ml/vial	1.25ml/vial	1.25ml/vial	1.25ml/vial
Catalog #	M0312	MBO312V1	MBO312V2	MB312	MRY032
Price	\$25	\$25	\$25	\$25	\$25

[Certificate of Analysis] Each batch was functionally tested in amplification of a 4.6kb DNA fragment of a single copy gene of mouse genomic DNA.

To order: sales@traferogen.com

Tech support: tech@traferogen.com

Traferogen, 2200 Smithtown Ave, Ronkonkoma, NY 11779

Table 1. Reaction set up*

Component	Volume (µl)/50 µl Rxn	Final Concentration
2X Master Mix	25	1X
Forward Primer	X	400 nM
Reverse Primer	X	400 nM
DNA template or crude sample	Y	cDNA, 200fg-100ng; gDNA, 10pg-100ng; Variable volume of tissue or microbial suspension culture.
DNase/RNase-free H ₂ O	Add to 50 µl	

*scale up/down all components proportionally according to reaction volumes (e.g. 25 µl or 20 µl).

Table 2. Thermal cycling protocol

Steps	Temperature & Duration	Cycle number
Initial Denature	95°C, 2 min	1
Amplification <ul style="list-style-type: none"> • Denature • Annealing • elongation 	95°C, 20 sec T _m -5°C, 30 sec 72°C, N* x 45 sec/kb	35-40
Final extension	72°C, 2-5min	1
Holding	10-4°C, ∞	

* N is the expected amplicon length in Kb.