

2X Hi Fi DNA Polymerase PCR Mix

Store at -20 °C

Description

2X Hi Fi DNA Polymerase PCR Mix is a 2X master mix consisting of Hi Fi DNA Polymerase, deoxynucleotides and reaction buffer that has been optimized and includes MgCl₂. All that is required is the addition of template, primers and water.

Applications

- High fidelity PCR.
- Generation of PCR products for cloning and expression.
- RT-PCR for cDNA cloning and expression.
- Generation of PCR product for blunt-end cloning.
- Site-directed mutagenesis.

Kit Contents

Component	HF1102-01	HF1101-01/11
2 × Hi Fi DNA Polymerase PCR Mix	1.0 mL	1.0 mL×5
Nuclease-free water	1.0 mL	12 mL×5

Protocol

Reaction Setup:

We recommend assembling all reaction components on ice and quickly transferring the reactions to a thermocycler preheated to the denaturation temperature (98 °C). All components should be mixed and centrifuged prior to use. It is important to add Hi Fi Master Mix last in order to prevent any primer degradation caused by the 3' → 5' exonuclease activity. Please note that protocols with Hi Fi DNA Polymerase may differ from protocols with other standard polymerases. As such, conditions recommended below should be used for optimal performance.

Component	25 µL reaction	50 µL reaction	Final Concentration
10 µM Forward Primer	1 µl	1 µl	0.5 µM
10 µM Reverse Primer	1 µl	1 µl	0.5 µM
DMSO (optional)	(0.75 µl)	(1.5 µl)	(3%)
2 × Hi Fi DNA Polymerase PCR Mix	12.5 µl	25 µl	1X
Template DNA	variable	variable	< 250 ng
Nuclease-free water	to 25 µl	to 50 µl	

Notes:

Gently mix the reaction. Collect all liquid to the bottom of the tube by a quick spin if necessary. Overlay the sample with mineral oil if using a PCR machine without a heated lid. Transfer PCR tubes from ice to a PCR machine with the block preheated to 95 °C and begin thermocycling:

Thermocycling conditions for a routine PCR:

Step	Temperature °C	Time	Number of cycles
Initial denaturation	98	1-3 min	1
Denaturation	98	30 s	25-35
Annealing	Tm-5	30 s	
Extension	72	0.5 kb/min	
Final extension	72	5-15 min	1

Limited Use and Warranty

This product is intended for *in vitro* research use only. Not for use in human.

This product is warranted to perform as described in its labeling and in BEIWO's literature when used in accordance with instructions. No other warranties of any kind expressed or implied, including, without limitation, implied warranties of merchantability or fitness for a particular purpose, are provided by BEIWO. BEIWO's sole obligation and purchaser's exclusive remedy for breach of this warranty shall be, at the option of BEIWO, to replace the products, BEIWO shall have no liability for any direct, indirect, consequential, or incidental damage arising out of the use, the results of use, or the inability to use it product.

For technical support or learn more product information, please contact us or visit our website.



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