LAMDA BIOTECH

PRODUCT INFORMATION

Catalog No.: D124R-25

Product Name: ***Taq Plus* 2X PCR MasterMix**

Size: 25ml

Description: Ready-to-use Master Mix, in the 2X format Red with *Taq* Plus DNA polymerase to which users only need to add template, primers and H_2O for the reaction. The *Taq* Plus Master Mix, in the 2X format Red also contains an inert, non-toxic red dye to visualize mixing; which also allows direct loading on gels after PCR for electrophoresis.

Taq Plus DNA Polymerase is a modified version of T*aq* DNA Polymerase, thus improving the fidelity and amplification length of the resulting DNA fragment. Amplified DNA contains both blunt-ended fragments and those with 3'-A overhangs, which allows users to choose either blunt-end or T-vector protocols to clone the amplified products.

Quality Control: Every lot is tested as to the integrity of the overall performance of the reaction system under the defined conditions for the enzyme.

Unit Definition: One unit incorporates 10 nmoles of dNTPs into acid-insoluble material in 30 minutes at 74°C.

1x Composition: 10mM KCl, 20mM Tris HCl (pH9.0), 16mM $(NH_4)_2SO_4$, 0.1% Triton X-100,

1.5mM $MgCl_2$*, 200µM dNTPs, 2.5units/25ul of *Taq* DNA polymerase, trace amount of red dye and enzyme stabilizers.

Storage: 4°C for up to one month, or -20°C for long term storage.

Magnesium Chloride: In general, 1.5mM $MgCl_2$ is recommended; this may vary with different conditions and primer sets. Some primers/templates may require adjustments for $MgCl_2$ concentration, which can be achieved as shown below:

Final $MgCl_2$ conc.	Additional 25mM $MgCl_2$ per 50µl reaction
1.5mM	------
2.0mM	1.0µl
2.5mM	2.0µl

Directions for use: For a 50µl reaction: use 25µl of *Taq* Plus Mix Red; add template, primers and H_2O to a final volume of 50µl. Cycling conditions vary for different templates and primers. To start with, try 30 cycles as follows: denature at 94°C for 30sec, anneal around 55°C for 30sec, and extend at 72°C for 1 minute/kb. After the PCR cycles, extend at 72°C for another 5 minutes to complete the PCR. Then store the reaction at 4°C.

Related Products	Catalog No.
• Tissue-Direct™PCR Kit	D300
• 100bp DNA Ladder	M107
• 1Kb DNA Ladder II	M108
• DNA SafeStain	C138
• Standard-Agarose	A113
• Ultra Bright LED Transilluminator	SLB-01
• UltraSlim® LED Illuminator	LB-16

This product is for research use only.