Product information

Product Name: 2X Taq & Taq LA PCR Mix

Catalog No: VN160MC, VN161MC, VN160MR, VN161MR, VN170MC, VN171MC, VN170MR, VN171MR

Packing Size: 500 x 25 µl rxns and 250 x 25 µl rxns

Shipping Condition: Ice pack

Storage Condition: -20^{0}C

Shelf life: At least 2 year if stored at -20^{0}C and 20 freezes / thaws or at least 1 week if stored at 4^{0}C.

Product Description:

Taq or **Taq LA Mix** is a ready-to-use 2X mixture of DNA polymerase, salts, magnesium and dNTPs for setting up a trouble-free PCR reaction. There is the **choice of an inert green dye**, used for direct gel loading. On a 1% agarose gel in 1X TBE, one blue dye migrates at approximately 4 kb and yellow one migrates at approximately 50 bp. All you have to do is to add template, specific primers and water, thereby save time, effort and minimize pipetting error.

2X Taq & Taq LA PCR Mix are recommended for all standard PCR applications. The mix is comprised of **Taq DNA polymerase** or **Taq DNA polymerase LA** DNA polymerase (for amplification of a longer fragment) and a novel buffer system that deliver very high yield PCR amplification over a wide range of PCR templates. It has been developed to give more robust amplification than other commonly-used mixes, allowing it to perform well with challenging templates.

Protocol:

PCR setting for a 25 µl reaction

Reagent	Volume	Final Concentration
2X Taq / Taq LA PCR Mix	12.5 µl	1x
Left Primer	Variable	0.2-0.4 µM
Right Primer	Variable	0.2-0.4 µM
DNA Template†	Variable	0.1-100 ng
De-ionized Distilled H_2O	Adjust final volume to 25 µl	-

†DNA amount depends mostly on genome size and target gene copy number.

Typical Cycling Parameters

Initial Denaturation	95^{0}C	2-5 min
25-40 cycles		
Denaturation	94^{0}C	20 to 60 sec
Annealing	50^{0}C to 68^{0}C	20 to 60 sec
Extension	70^{0}C	1-2 min / 1kb target
Final Extension	70^{0}C	5 min
Hold	4^{0}C	

Troubleshooting guide

No product or Low yield of product	Check your PCR setting to see if you miss some components. Increase PCR cycles. Try gradient annealing temperature to find optimal one. Check the DNA and primers to see if they degraded.
Non-specific products are observed	Try gradient annealing temperature to find optimal annealing temperature for your target. Check your primers or redesign them if necessary. Check GC content of the target. If it is more than 65%, you may need to use GC-rich version (inquiry).

Note: This product is for R&D use only

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