

2X Long Range PCR DNA Polymerase Master Mix **Blue**

(2mM MgCl₂)

Cat. No.: 180601-1

Size: 1.25 mL

Storage:-20

General Description

Taq/Pfu DNA Polymerase Master Mix **Blue** is a ready-to-use 2.0x reaction mix, it is a enzyme mixture of Taq and pfu DNA polymerase, it provides more efficient amplification and higher fidelity than conventional Taq DNA polymerase under conventional PCR conditions. In optimized PCR, it can result in several folds increase in fidelity over Taq DNA polymerase alone.

The PCR product amplified with this mixture has one A added at 3'-end, so the product can be directly used for TA cloning. The mixture also contains xylene cyanol tracking dyes, allowing direct loading onto gel after PCR reaction.

Key Features

- Processes >**8kb** with extremely high fidelity
- Error rate **1.45 x10⁻⁶**
- Long Range enzyme and require an extension time of **1-2 min./kb**.Elongation rate(**45 bases/sec**)

Composition of 2x Long Range PCR Master Mix **Blue**

150 mM Tris-HCl pH 8.5, 40 mM (NH₄)₂SO₄, 4.0 mM MgCl₂, 0.2% Tween 20, 0.4 mM dNTPs

Taq and Pfu DNA polymerase with proper ratio

xylene cyanol tracking dyes and a stabilizer

Standard PCR Method:

For 20 or 50µl reaction:

Water	Xµl	Yµl
2X PCR Master Mix	25µl	10µl
5-50µM forward primer	1µl	1µl
5-50µM reverse primer	1µl	1µl
* template DNA	10pg-1µg	10pg-1µg
Final volume	50 µl	20µl

* The amount of DNA template varies according to complexity of its sequence. In the case of mammalian DNA, up to 1µg is used per reaction. Typical amount of yeast, bacterial, and plasmid DNAs used per reaction are 10ng, 1ng, and 10pg, respectively.

BIONOVAS Biotechnology Co., Ltd.

647-808-8236

No. 194 kingsdale Ave, Toronto. Ontario. M2N3W9