

ENZYMES

KOD One PCR Master Mix

CAT# KMM-101

SOURCE

Recombinant (E. coli)

SPECIFICATIONS

PCR Assay 10kbp fragment could be amplified from human genomic DNA using fast cycle. Extension time is 50 seconds.

PRODUCT FORMAT

PART #	DESCRIPTION	FORMAT	CONTENTS
KMM-101	KOD One PCR Master Mix	Kit (200 reactions)	Master Mix 1mL x 5
KMM-151 (TBC)	KOD One PCR Master Mix	EA	Master Mix 500mL (20,000 reactions)
KMM-201	KOD One PCR Master Mix -Blue	Kit (200 reactions)	Master Mix 1mL x 5 (200 reactions)
KMM-251 (TBC)	KOD One PCR Master Mix -Blue	EA	Master Mix 500mL

DESCRIPTION

KOD One PCR Master Mix and KOD One PCR Master Mix Blue are two PCR Master Mixes based on genetically modified KOD DNA polymerase (UKOD). KOD One series enables fast PCR, which has an extension time of 5 sec/kb by applying UKOD a new Elongation Accelerator. These Master Mixes provide greater efficiency and elongation capabilities than conventional PCR enzymes. These show greater amplification success from crude specimens.

KOD One series contains two types of anti-KOD DNA polymerase antibodies that inhibit the polymerase and 3' → 5' exonuclease activities, thus allowing for Hot Start PCR.

Primers or Templates Containing Inosines (dI) or Uracils (dU) can be used. KOD One series can use primers or templates containing Inosines (dI) or Uracils (dU), whereas conventional high-fidelity PCR enzymes cannot.

CHARACTERISTICS

- Fast
- High fidelity and high efficiency
- Amplification from crude samples
- Applicable for Direct PCR, Colony PCR, Amplification of NGS libraries and site directed gene mutation

ENZYMES
CAT# KMM-101

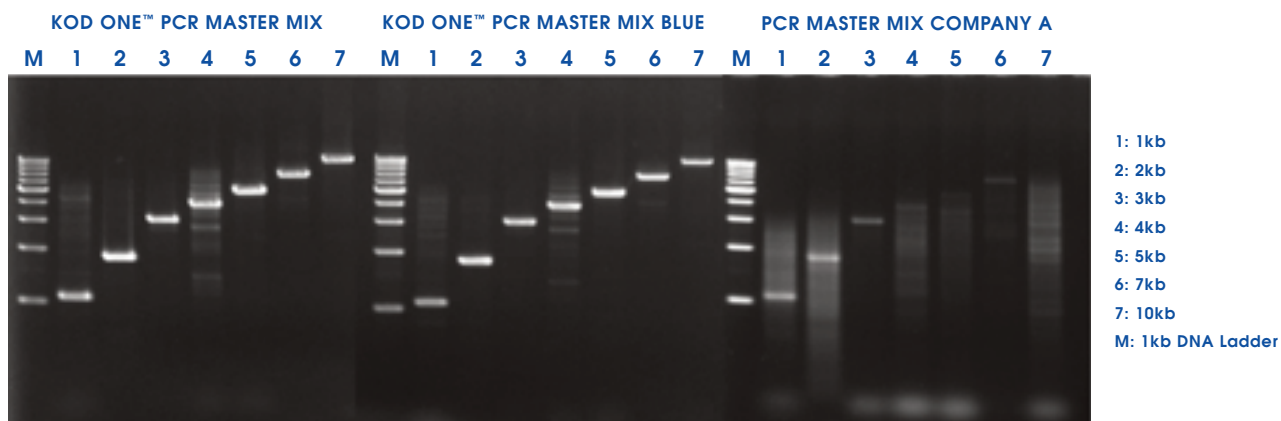
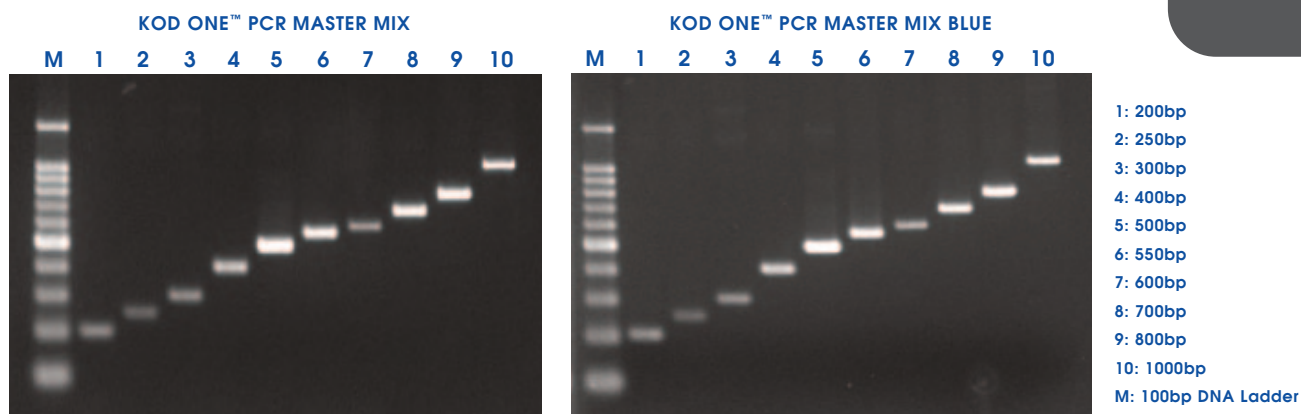
SEKISUI
DIAGNOSTICS

Because every result matters™

APPLICATION DATA

Fast PCR

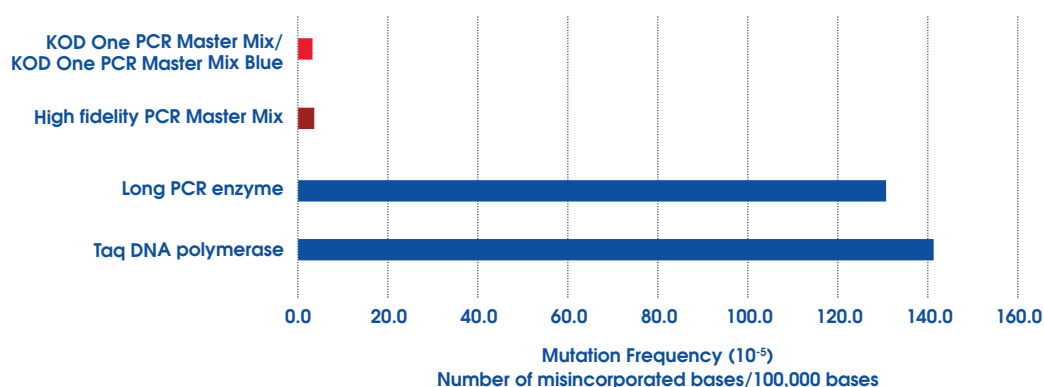
Various targets were amplified with KOD One PCR Master Mix and KOD One PCR Master Mix Blue using the ultra-fast cycling conditions. KOD One series successfully amplified all targets.



APPLICATION DATA continued

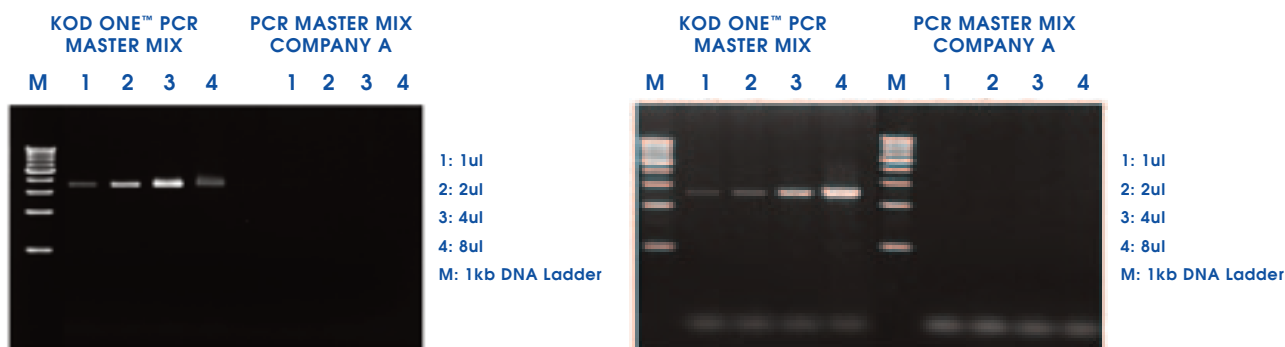
PCR Error Ratio Fidelity

The error ratio of various PCR enzymes were compared by determining the sequences of the amplicons from human β -globin gene. The amplicons were cloned into the vector using TA cloning kit and the sequences were determined. KOD One PCR Master Mix and KOD One PCR Master Mix Blue showed excellent fidelity and the mutation frequency were approximately 80 times lower than Taq DNA polymerase.



Amplification from Crude Samples

Amplification from whole blood and that from mouse lysate were compared. KOD One PCR Master Mix amplified the targets effectively.



THE AMERICAS

Sekisui Diagnostics, LLC
 One Wall Street
 Burlington, MA 01803
 Phone: 800 332 1042
 Fax: 800 762 6311

engage@sekisuienzymes.com

INTERNATIONAL

Sekisui Diagnostics (UK) Limited
 Liphook Way, Allington
 Maidstone, Kent, ME16 0LQ, UK
 Phone: +44 1622 607800
 Fax: +44 1622 607801

MANUFACTURED BY



DISTRIBUTED BY



Because every result matters™

www.sekisuidiagnostics.com