BIORI BIOTECH

2026

# LIFE SCIENCE

## PRODUCT CATALOG

Pursuing Excellence in Quality Providing Prompt and Thorough Service

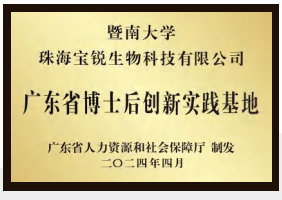
# ABOUT US

Founded in 2012, Zhuhai Biori Biotechnology Co., Ltd. provides biological raw materials and reagent solutions for life science research, in vitro diagnostics (IVD), and biopharmaceutical applications. The company builds on established capabilities in protein engineering, recombinant expression, process development, and application-focused research to support both research and industrial customers worldwide.

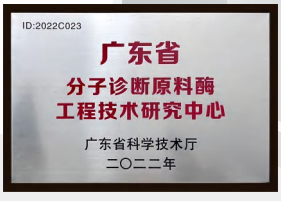
Biori operates under ISO 13485 and ISO 9001 certified quality management systems and maintains GMP and GMP-grade manufacturing facilities to ensure consistent quality and reliable supply. With a long-term focus on innovation and quality, Biori aims to support customer success, foster sustainable team growth, and contribute to the advancement of life science and healthcare technologies.


ational Level Specialized, Refined, Differentiated, and Innovative Little Giant Enterprise


National High-Tech Enterprise



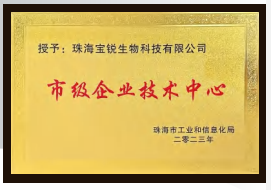

Postdoctoral Innovation and Practice Base




Molecular Diagnostic Raw Materials Technology Center of Guangdong Province


ISO 9001:2015


ISO 13485:2016




Municipal Enterprise Technology Center

# CONTENTS

# 01 Enzymes

## Conventional PCR Enzymes

| Product Name | Spec. | Cat. No. | Features | Recommended Applications | |
|---|---|---|---|---|---|
| Robustart Taq | 100 U<br>1000 U<br>5000 U | BR1A101-01/02/03 | ❶Antibody-mediated, hot start at 95°C for 30 s-1min.<br>❷High sensitivity and specificity.<br>❸Strong applicability for various assays. | › Endpoint PCR, qPCR.<br>› Multiplex PCR, genotyping, high-sensitivity virus detection. | |
| Robustart Taq QS II | 100 U<br>1000 U<br>5000 U | BR1A102-01/02/03 | ❶Antibody-mediated, hot start at 95°C for 30 s-1min.<br>❷Fast amplification speed, ⩾1 kb/10s, high specificity.<br>❸High tolerance to inhibitors from samples like blood, swabs. | › Endpoint PCR , qPCR.<br>› Fast amplification, direct amplification, POCT applications for nucleic acid detection. | |
| Neoscript RTase | 10000 U<br>40000 U<br>200000 U | BR1D101-01/02/03 | ❶Reverse transcription temperature range 42-55°C.<br>❷Excellent specificity and sensitivity.<br>❸High applicability, suitable for various high-sensitivity assays. | › cDNA synthesis, detection of various RNA pathogens.<br>› Gene expression analysis. | |
| Murine RNase Inhibitor | 2000 U<br>10000 U<br>20000 U | BR1D901-01/02/03 | ❶Expressed and purified in soluble form from *E.coli*, broadly inhibits various RNases.<br>❷Lacking the two oxidation-sensitive cysteine residues present in the human protein, thus exhibits enhanced antioxidant activity. | › cDNA synthesis.<br>› RT-PCR/qPCR/PCR.<br>› Transcription/translation.<br>› RNA preparation and puration . | |

## Restriction & Modification Enzymes

| Product Name | Spec. | Cat. No. | Features | Recommended Applications | |
|---|---|---|---|---|---|
| pFEN | 250 U<br>500 U | BR1G101–01/02 | ❶pFEN is a thermostable Flap Endonuclease I that catalyzes cleavage of 5´ flap DNA in bifurcated double-stranded DNA substrates, generating 5´ phosphate ends.<br>❷ DNA ligase can ligate FEN1 products to form double-stranded DNA.<br>❸ In vivo, FEN1 is essential not only for the Okazaki fragment maturation pathway but also involved in base excision repair. | Cleavage of structure-specific DNA. | |
| Aci I | 100 U<br>200 U<br>1000 U | BR1G102–01/02/03 | 5'…C▼CGC…3'<br>3'…GGC▲G…5'<br>Restriction enzyme product, accurately recognizes and cleaves at C'CGC sites. | Suitable for cloning and identification by restriction digestion. | |
| HinP1 I | 1000 U<br>2000 U | BR1G103–01/02 | 5'…G▼CGC…3'<br>3'…CGC▲G…5'<br>Restriction enzyme product, accurately recognizes and cleaves at G'CGC sites. | Suitable for cloning and identification by restriction digestion. | |

| Product Name | Spec. | Cat. No. | Features | Recommended Applications | |
|---|---|---|---|---|---|
| Hha I | 1000 U<br>2000 U<br>10000 U | BR1G104–01/02/03 | 5'...G▼CGC...3'<br>3'...CGC▲G...5'<br>Restriction enzyme product, accurately recognizes and cleaves at GCG'C sites. | Suitable for cloning and identification by restriction digestion. | |
| Hpa II | 1000 U<br>2000 U<br>10000 U | BR1G105–01/02/03 | 5'...C▼CGG...3'<br>3'...GGC▲C...5'<br>Restriction enzyme product, accurately recognizes and cleaves at C'CGG sites. | Suitable for cloning and identification by restriction digestion. | |
| BspE I | 1000 U<br>2000 U<br>5000 U | BR1G106–01/02/03 | 5'...T▼CCGGA...3'<br>3'...AGGCC▲T...5'<br>Restriction enzyme product, accurately recognizes and cleaves at T'CCGGA sites. | Suitable for cloning and identification by restriction digestion. | |
| BsrF I | 1000 U<br>2000 U<br>5000 U | BR1G107–01/02/03 | 5'...R▼CCGGY...3'<br>3'...YGGCC▲R...5'<br>Restriction enzyme product, accurately recognizes and cleaves at R'CCGGY sites. | Suitable for cloning and identification by restriction digestion. | |
| BssH II | 250 U<br>500 U<br>2500 U | BR1G108-01/02/03 | 5'...G▼CGCGC...3'<br>3'...CGCGC▲G...5'<br>Restriction enzyme product, accurately recognizes and cleaves at G'CGCGC sites. | Suitable for cloning and identification by restriction digestion. | |
| BspQ I | 1000 U | BR1G109-01 | 5'...GCTCTTC$(N)_1$▼...3'<br>3'...CGAGAAG$(N)_4$▲...5'<br>Type IIS restriction enzyme recognizes non-palindromic DNA sequences and cleaves outside the recognition sequence.<br>Restriction site: GCTCTTC(1/4). | Suitable for cloning and identification by restriction digestion. | |
| Bsa I | 2000 U | BR1G110–01 | 5'...GGTCTC$(N)_1$▼...3'<br>3'...CCAGAG$(N)_5$▲...5'<br>Type IIS restriction enzyme recognizes non-palindromic DNA sequences and cleaves outside the recognition sequence.<br>Restriction site: GGTCTC(1/5) | Suitable for cloning and identification by restriction digestion. | |

# 02 Molecular Biology Research

## PCR Premix

| Product Name | Spec. | Cat. No. | Features | Recommended Applications |
|---|---|---|---|---|
| ★★ 2× HandyAmp Fast Premix (Dye plus) | 5 mL<br>25 mL<br>50 mL | BR1A401-11/12/13 | ❶Fast amplification: 10-30 sec/kb.<br>❷High success rate: Compatible with crude templates like plant/animal lysates, bacteria, high/low GC systems.<br>❸Easy operation: 2× premix, add primers and template.<br>❹Pre-mixed electrophoresis indicator, products can be directly loaded for electrophoresis. | › Fast PCR.<br>› Genotyping.<br>› Colony PCR. |

## cDNA Synthesis

| Product Name | Spec. | Cat. No. | Features | Recommended Applications |
|---|---|---|---|---|
| Neoscript 1st cDNA Synthesis Kit II (+gDNA wiper) | 100 T<br>500 T | BR1D201-01/02 | ❶Flexible choice of RT primers.<br>❷Suitable for fast RT.<br>❸Strong tolerance to inhibitors from blood, animal tissue sources, and nucleic acid extraction residues. | › First-strand cDNA synthesis.<br>› Reverse transcription (includes gDNA removal).<br>› Gene expression analysis.<br>› Two-step qRT-PCR detection. |
| Neoscript 1st cDNA Synthesis Premix for qPCR (+gDNA wiper) | 100 T<br>500 T | BR1D301-02/03 | ❶Suitable for high-temperature RT at 50°C.<br>❷Ready-to-use premix for convenience and time-saving.<br>❸Includes gDNA removal module, reducing primer design requirements. | › First-strand cDNA synthesis.<br>› Reverse transcription (includes gDNA removal).<br>› Gene expression analysis.<br>Two-step qRT-PCR detection. |
| Neoscript 1st cDNA Synthesis Premix II for qPCR (+gDNA wiper) | 100 T<br>500 T | BR1D302-01/02 | ❶Suitable for fast RT.<br>❷Strong tolerance to inhibitors from blood, animal tissue sources, and nucleic acid extraction residues.<br>❸Ready-to-use premix for convenience and time-saving.<br>❹Includes gDNA removal module, reducing primer design requirements. | › First-strand cDNA synthesis.<br>› Reverse transcription (includes gDNA removal).<br>› Gene expression analysis.<br>› Two-step qRT-PCR detection. |

## qPCR

| Product Name | Spec. | Cat. No. | Features | Recommended Applications | |
|---|---|---|---|---|---|
| 2× Robustart SYBR qPCR Premix (Universal ROX) | 500 T<br>2500 T | BR1A501-03/04 | ❶Antibody-mediated enzyme with optimized buffer, good specificity.<br>❷Strong fluorescence signal, stable results.<br>❸Universal ROX reference dye, suitable for various qPCR instruments, no need to adjust ROX concentration for different instruments. | › Genotyping.<br>› Gene expression difference analysis.<br>› Absolute quantification analysis. | |
| 2× FastAmpli SYBR qPCR Premix (Universal ROX) | 500 T<br>2500 T | BR1E102-01/02 | ❶Amplification speed ⩾1 kb/10 s, suitable for fast qPCR detection.<br>❷Excellent specificity and sensitivity.<br>❸Universal ROX reference dye, suitable for various qPCR instruments, no need to adjust ROX concentration for different instruments. | › Fast amplification detection.<br>› Genotyping.<br>› Gene expression difference analysis.<br>› Absolute quantification analysis. | |
| 2× FastAmpli U+ SYBR qPCR Premix (Universal ROX) | 500 T<br>2500 T | BR1E103-01/02 | ❶Amplification speed ⩾1 kb/10 s, suitable for fast qPCR detection.<br>❷Excellent specificity and sensitivity.<br>❸Contains UDG enzyme and dUTP buffer system for contamination control.<br>❹Suitable for multiplex amplification. | › Fast amplification detection.<br>› Genotyping.<br>› Gene expression difference analysis.<br>› Absolute quantification analysis. | |
| 2× Robustart Probe qPCR Premix (Universal ROX) | 100 T<br>500 T | BR1E201-01/02 | ❶Antibody-mediated, hot start at 95°C, 30 s-1min.<br>❷High sensitivity, strong specificity.<br>❸Strong applicability for various assays. | › Multiplex PCR, genotyping.<br>› Gene expression difference analysis.<br>› Absolute quantification analysis. | |
| 2× FastAmpli Probe qPCR Premix (Universal ROX) | 100 T<br>500 T | BR1E202-01/02 | ❶Amplification speed ⩾1 kb/10 s, suitable for fast qPCR detection.<br>❷Excellent specificity and sensitivity; Suitable for multiplex amplification. | › Fast amplification detection.<br>› Multiplex PCR, genotyping.<br>› Gene expression difference analysis.<br>› Absolute quantification analysis. | |
| 2× FastAmpli U+ Probe qPCR Premix (Universal ROX) | 100 T<br>500 T | BR1E203-01/02 | ❶Amplification speed ⩾1 kb/10 s, suitable for fast qPCR detection.<br>❷Excellent specificity and sensitivity.<br>❸Contains UDG enzyme and dUTP buffer system for contamination control.<br>❹Suitable for multiplex amplification. | › Fast amplification detection.<br>› Multiplex PCR, genotyping.<br>› Gene expression difference analysis.<br>› Absolute quantification analysis. | |

## qRT-PCR

| Product Name | Spec. | Cat. No. | Features | Recommended Applications | |
|---|---|---|---|---|---|
| 4× Neoscript RT SYBR qPCR Premix (Universal ROX) | 100 T<br>500 T | BR1F101-01/02 | ❶RT temperature range 42-55°C.<br>❷Excellent specificity and sensitivity.<br>❸Strong applicability, suitable for various high-sensitivity detections. | › Quantitative RT-PCR.<br>› Gene expression difference analysis.<br>› Absolute quantification analysis. | |
| 4× Neoscript RT Probe qPCR Premix (Universal ROX) | 100 T<br>500 T | BR1F201-01/02 | | | |

## PCR-Related

| Product Name | Spec. | Cat. No. | Features | Recommended Applications |
|---|---|---|---|---|
| dNTP Mix (10mM each) | 1mL<br>5mL | BR1A802-01/02 | ❶HPLC purity ⩾99%.<br>❷Strict QC ensures batch consistency. | Suitable for reverse transcription and various PCR reactions, e.g., RT-PCR; qPCR; PCR. |
| dATP (100mM) | 1 mL | BR1A803-01 | | |
| dTTP (100mM) | 1 mL | BR1A804-01 | | |
| dCTP (100mM) | 1 mL | BR1A805-01 | | |
| dGTP (100mM) | 1 mL | BR1A806-01 | | |
| dUTP (100mM) | 1 mL | BR1A807-01 | | |
| Heat-labile UDG | 100 U<br>500 U | BR1A808-01/02 | ❶Rapid inactivation at 50°C.<br>❷Compatible with common PCR, qPCR, RT-PCR, RT-qPCR reaction systems. | › Removing aerosol contamination from dU-containing PCR products.<br>› Removing uracil bases from ssDNA or dsDNA. |
| 5× PCR Enhancer | 0.5 mL<br>2.5 mL | BR1A809-01/02 | ❶Enhance amplification efficiency.<br>❷Improve amplification stability. | PCR optimization, especially for amplification of complex templates. |
| 3× Novel GC Buffer ($Mg^{2+}$ free) | 1 mL<br>5 mL | BR1A810-01/02 | Buffer formula optimized with special formulation to promote denaturation of high GC nucleic acid fragments. | Buffer formula optimized with special formulation to promote denaturation of high GC fragments. |

## Electrophoresis-Related

| Product Name | Spec. | Cat. No. | Features | Recommended Applications |
|---|---|---|---|---|
| ★ DL2000 DNA Marker | 250 μL<br>500 μL | BR1B202-01/02 | ❶Good stability: Stable at RT for 6 months, all bands clear and sharp.<br>❷Easy operation: Ready-to-use, load directly for electrophoresis. | › Agarose gel electrophoresis.<br>› DNA molecular weight standard. |
| ★ DL15000 DNA Marker | 250 μL<br>500 μL | BR1B204-01/02 | | |
| RNA Ladder 1000 | 50 μL | BP-20-10 | ❶Wide coverage, clear and sharp bands.<br>❷Ready-to-use, easy operation. | › Non-denaturing gels, denaturing gels, etc.<br>› RNA molecular weight standard. |
| RNA Ladder 6000 | 100 μL | BP-10-50 | | |
| RNA Ladder 12000 | 100 μL | BP-15-50 | | |

## Cloning-Related

| Product Name | Spec. | Cat. No. | Features | Recommended Applications |
|---|---|---|---|---|
| 2× SeamLess Cloning Premix | 20 T<br>40 T | BR1C101-01/02 | ❶Simple, fast, efficient seamless cloning reagent.<br>❷Directional cloning of inserts into any site of the vector, assembly of up to 5 inserts in one step.<br>❸No need to consider restriction sites.<br>❹Assembly completed at 50°C for 15-60 min. | › Fast Cloning、High-throughput Cloning、Seamless Cloning、DNA Site-directed Mutagenesis.<br>› The products can be used directly for PCR, RCA, or other molecular biological manipulations. |
| 2× Super Ligation Premix | 20 rxns<br>50 rxns<br>100 rxns | BR1C302-01/02/03 | ❶Compatible: Compatible with sticky ends, blunt ends, TA, linker or adapter ligation.<br>❷Fast: Ligation can be completed quickly in 5 minutes at 25°C.<br>❸Convenient: Reaction mixture can be used directly for bacterial transformation. | Sticky ends, blunt ends, TA, linker or adapter ligation. |

# 03 Nucleic Acid Extraction

| Product Name | Spec. | Cat. No. | Features | Recommended Applications | |
|---|---|---|---|---|---|
| Plasmid Mini Kit | 50 T<br>200 T | BR2A101-01/02 | ❶Fast: Few steps, simple operation, saves time.<br>❷Efficient: Extracts >85% plasmid DNA from bacteria. | Small-scale plasmid extraction, for molecular biology experiments like digestion, transformation, sequencing, and PCR. | |
| EndoFree Plasmid Maxi Kit | 10 T | BR2A102-01 | ❶Fast & High Yield: Extracts 200 μg-1.5 mg plasmid in ~1 h, predominantly supercoiled.<br>❷High Plasmid Purity: Low endotoxin content.<br>❸High Transfection Efficiency: Suitable for high-level transfection experiments in most cell lines. | Large-scale endotoxin-free plasmid extraction, suitable for routine experiments (digestion, PCR, sequencing, ligation, transformation) and high-end experiments (gene therapy, cell microinjection, gene silencing, transfection). | |
| Gel Purification Kit | 50 T<br>200 T | BR2A103-01/02 | ❶Speed: DNA recovery in 15 min, multiple samples processed simultaneously.<br>❷Few Steps: Simple operation, completed in a few centrifugations.<br>❸High Efficiency: Recovers high-purity target DNA.<br>❹Capacity: Each column adsorbs up to 10 μg DNA per use. | Purified DNA can be directly used for molecular biology experiments like ligation, transformation, digestion, sequencing, hybridization. | |

# 04 NGS

## High-fidelity Enzyme

| Product Name | Spec. | Cat. No. | Features | Recommended Applications | |
|---|---|---|---|---|---|
| AmpHifi HS DNA Polymerase III | 100 U<br>500 U<br>1000 U | BR3P103-51/54/56 | ❶Stable & Efficient: Strong inhibitor tolerance.<br>❷High Speed & High Yield: 1kb/10s amplification, lower enzyme consumption, higher product yield.<br>❸Hot-Start High-Fidelity: Higher specificity, enhanced fidelity.<br>❹Broad Applicability: Suitable for conventional PCR, multiplex PCR, and specialized PCR applications. | › Gene cloning.<br>› Long-range PCR.<br>› Multiplex amplification.<br>› Library amplification. | |

## High-fidelity Premix

| Product Name | Spec. | Cat. No. | Features | Recommended Applications |
|---|---|---|---|---|
| 2× AmpHifi EXL Premix | 24 T<br>96 T | BR3M402-03/06 | ❶Stable & Efficient: Extended amplification duration (up to 15h); compatible with low-purity templates.<br>❷Hot-Start & User-Friendly: Room-temperature handling; ready-to-use 2× premix.<br>❸High-Speed Long-Range Amplification: Compatible with 1kb-20kb fragments; fastest speed 1kb/10s.<br>❹Broad GC Tolerance: 30%-80%. | › Long-range PCR.<br>› Sanger sequencing, Next-generation sequencing (NGS), Long-read sequencing.<br>› Colony PCR without DNA purification.<br>› Strain identification.<br>› Genotyping. |
| ★★ 2× Super-Fidelity Master Mix (Dye Plus) | 1 mL<br>5 mL | BR3M121-01/02 | ❶Broad Template Compatibility: Compatible with genomic DNA from various species, bacterial cultures, crude nucleic acid extracts, etc.<br>❷Wide Amplicon Length Range: Supports amplification of 0.1kb to 20kb target fragments.<br>❸Extensive GC Tolerance: 20% to 80%.<br>❹Enhanced Sensitivity: Stable amplification with plasmid templates as low as 1pg.<br>❺Pathogen Detection: Applicable in PCR, qPCR, or DNA library construction. | › Gene Cloning & Expression Analysis.<br>› Functional gene research(Scientific Research).<br>› Genetic Analysis & Transgenic Analysis. |

## Library Preparation Solution

| Product Name | Spec. | Cat. No. | Features | Recommended Applications |
|---|---|---|---|---|
| Biori® NGS DNA Clean Beads | 5 mL<br>60 mL<br>250 mL | BR3N401-02/05/06 | ❶Exceptional Library Recovery Efficiency: Biori magnetic beads rank among the top-tier products globally with >85% recovery rate (superior product yield).<br>❷Precision Size Selection: Flexible recovery of intermediate fragment sizes through controlled bead-to-sample ratios. | › DNA/RNA library purification.<br>› Library fragment size selection.<br>› Post-extraction DNA/RNA purification. |
| Universal DNA Library Prep Kit | 24 T<br>96 T | BR3D201-01/03/06 | ❶Broad Compatibility: Suitable for nucleic acids from diverse sources, species, and input quantities.<br>❷User-Friendly Operation: Insert size controlled by incubation time.<br>❸Single-Tube Workflow: Complete DNA fragmentation, end repair, and dA-tailing in one step.<br>❹Inhibitor Resistance: Tolerates 0.2mM EDTA or residual organic reagents from extraction.<br>❺High-Efficiency Library Prep: Integrates optimized fragmentation, ligation, and amplification modules for higher library yields. | › Whole Genome Sequencing (WGS).<br>› Whole-Exome/Targeted Capture Sequencing.<br>› Amplicon Sequencing.<br>› Chromatin Immunoprecipitation Sequencing (ChIP-seq).<br>› Metagenomic Sequencing.<br>› Methylation Sequencing. |

| Product Name | Spec. | Cat. No. | Features | Recommended Applications | |
|---|---|---|---|---|---|
| Multiplex PCR Targeted Sequencing Solution | 8 T<br>24 T<br>96 T | BR3C202-01/03/06 | ❶Stringent Contaminant Control:<br>• Manufactured in cleanroom environments by certified personnel.<br>• Nucleic Acid Grade enzymes with sterile filtration.<br>• Rigorous background microbe monitoring.<br>❷Streamlined Workflow:<br>• Eliminates separate cDNA synthesis step.<br>• No intermediate purification required.<br>• Single-tube DNA & RNA co-targeted library preparation.<br>❸Enhanced Efficiency:<br>• Compatible with diverse clinical samples: Bronchoalveolar lavage fluid (BALF) Cerebrospinal fluid (CSF)、Sputum Swabs.<br>• Robust performance across 1ng-500ng input ranges.<br>❹Automation-Ready Format.<br>❺Custom Multiplex Amplification Library Services. | › Pathogen Targeted Sequencing.<br>› Other Target Enrichment Sequencing. | |

## 05 Protein Research

| Product Name | Spec. | Cat. No. | Features | Recommended Applications | |
|---|---|---|---|---|---|
| 180 kDa Prestained Protein Marker | 100 T<br>500 T | BR4D103-01/02 | ❶Prestained protein marker, all bands clear.<br>❷High stability: Stable at 4°C for 3 months, stable after 50 freeze-thaw cycles. | SDS-PAGE electrophoresis, Western Blot monitoring. | |
| BCA Protein Quantification Kit | 250 T<br>500 T<br>2500 T | BR4D201-01/02/03 | ❶Simple operation.<br>❷High sensitivity.<br>❸Wide compatibility. | Protein quantification detection. | |

## 2× HandyAmp Fast Premix (Dye plus)

Cat. No.: BR1A401

2× HandyAmp Fast Premix (Dye plus) is a product containing DNA polymerase screened by gene modification with high success rate. This product has extremely high DNA affinity and pcr processivity, enabling rapid amplification at an extension rate of 1-30 sec/kb (⩽2 kb, 1 sec/kb; ⩽5 kb, 5 sec/kb; ⩽10 kb, 10 sec/kb). It boasts wide template compatibility, suitable for genomic DNA or crude templates from animals, plants, bacteria, etc., as well as target sequences with varying GC content. This reagent is pre-mixed with electrophoresis indicators, allowing the pcr products to be directly used for electrophoresis, which is convenient and efficient.

### Components

| Components | BR1A401-11<br>200 rxns (50 μL/rxn) | BR1A401-12<br>1000 rxns (50 μL/rxn) | BR1A401-13<br>2000 rxns (50 μL/rxn) |
|---|---|---|---|
| 2× HandyAmp Fast Premix (Dye plus) | 5× 1 mL | 25× 1 mL | 50× 1 mL |

### Features

**01 Rapid Amplification**

1-30 sec/kb
(⩽2 kb, 1 sec/kb;
⩽5 kb, 5 sec/kb;
⩽10 kb, 10 sec/kb).

**02 High Success Rate**

Compatible with genomic DNA or crude templates of animals, plants, bacteria, etc., and high/low - GC content targets.

**03 Multiple Amplification**

Can perform 5-plex amplification.

**04 Convenient Operation**

Only need to add primers and templates for amplification; Containing a version electrophoresis indicator, pcr products can be directly loaded for electrophoresis.

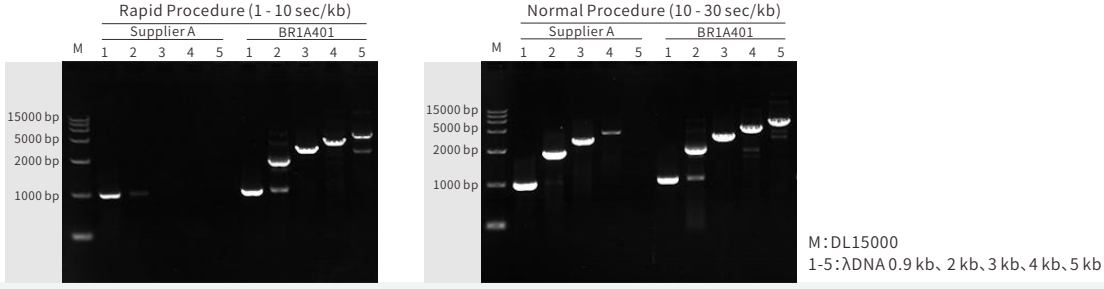
### Recommended Applications

1 Fast PCR.

2 Genotyping.

3 Colony PCR.

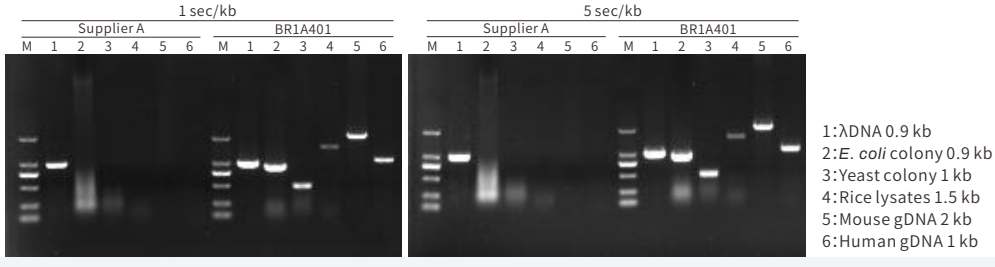
### Rapid Amplification




● Figure 1: Comparison of the performance of Biori BR1A401 and supplier A in amplifying λ-DNA fragments within 5 kb under different procedures.

**CONCLUSION** Biori BR1A401 only needs 1 hour to complete the amplification of DNA fragments within 5 kb, showing rapid amplification performance.

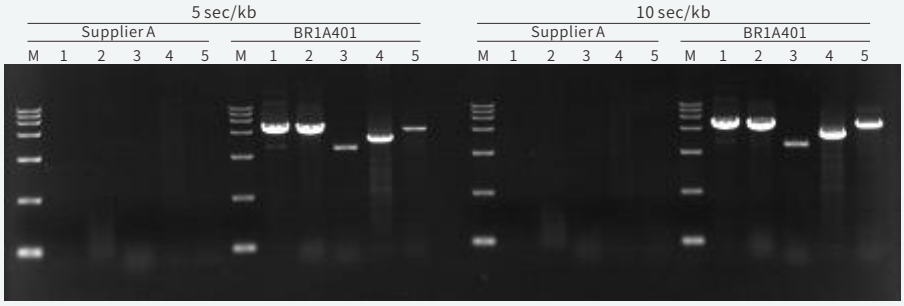
### Rapid Amplification of DNA Fragments within 2 kb (Genomic DNA or Crude Templates)




● Figure 2: Comparison of the performance of Biori BR1A401 and supplier A in amplifying DNA fragments within 2 kb under different templates.

**CONCLUSION** Using different types of templates, Biori BR1A401 can complete the amplification of DNA fragments within 2 kb at an extension rate of 1 sec/kb.

## Rapid Amplification of Fragments within 5 kb (Genomic DNA or Crude Templates)

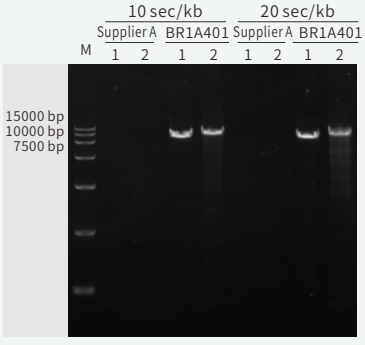



1: λDNA 5 kb
2: *E. coli* colony 5 kb
3: Rice lysates 2.9 kb
4: Mouse gDNA 4 kb
5: Human gDNA 5 kb

- Figure 3: Comparison of the performance of Biori BR1A401 and supplier A in amplifying targets within 5kb in different samples.

**CONCLUSION** Amplification tests were performed on templates of different species, and the extension rate of Biori BR1A401 for fragments within 5 kb can reach up to 5 sec/kb.

## Rapid Amplification of Fragments within 10 kb



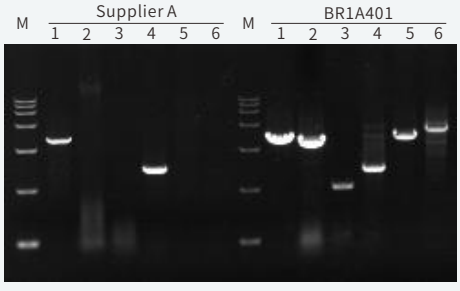

Notes : M : DL15000
1 : human gDNA 8 kb
2 : human gDNA 10 kb

- Figure 4: Comparison of the amplification performance of Biori BR1A401 and supplier A for fragments within 10 kb in different samples.

**CONCLUSION**

The extension rate of Biori BR1A401 for fragments within 10 kb can reach up to 10 sec/kb.

## Compatibility with various templates



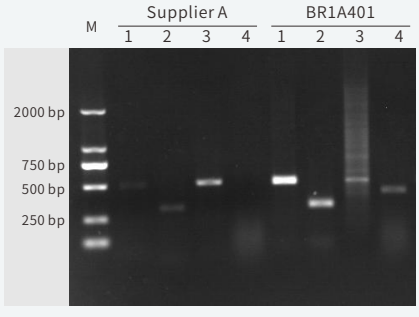

Notes : M : DL15000
1 : λDNA 3 kb
2 : *E.coli* colony 3 kb
3 : yeast colony 1 kb
4 : Rice lysate 1.5 kb
5 : mouse gDNA 3 kb
6 : human gDNA 4 kb

- Figure 5: Comparison of template compatibility of Biori BR1A401 and supplier A.

**CONCLUSION**

The template types of Biori BR1A401 are compatible with microorganisms, plants, animals, humans, etc.

## Compatibility with varying GC% Templates



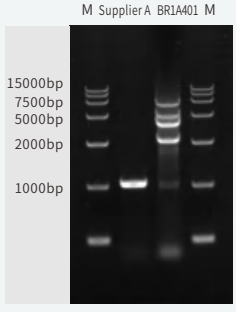

Notes
M : DL15000
1 : λDNA 3 kb
2 : E. coli colony 3 kb
3 : yeast colony 1 kb
4 : Rice lysate 1.5 kb
5 : mouse gDNA 3 kb
6 : human gDNA

- Figure 6: Comparison of amplification of high/low GC fragments by Biori BR1A401 and supplier A.

**CONCLUSION**

Biori BR1A401 can amplify divergent GC% templates.

## Multiplex Amplification




| Human gDNA |
|---|
| 7 kb |
| 5 kb |
| 4 kb |
| 2.5 kb |
| 1 kb |

- Figure 7: Comparison of pentaplex amplification by Biori BR1A401 and supplier A.

**CONCLUSION**

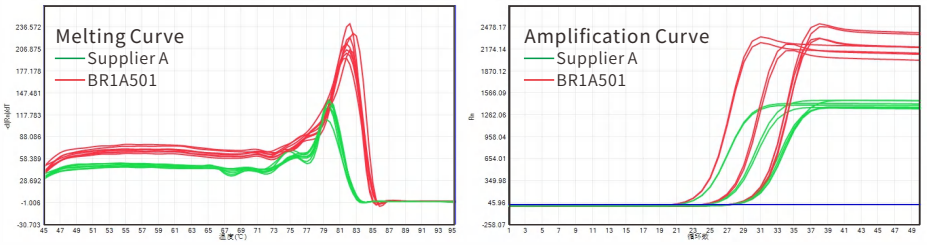
Biori BR1A401 can complete 5-plex amplification, and multiple targets can be detected in the same reaction.

## Robustart SYBR qPCR Premix (Universal ROX)

Cat. No.: BR1A501

### Competitive Comparison Test 1

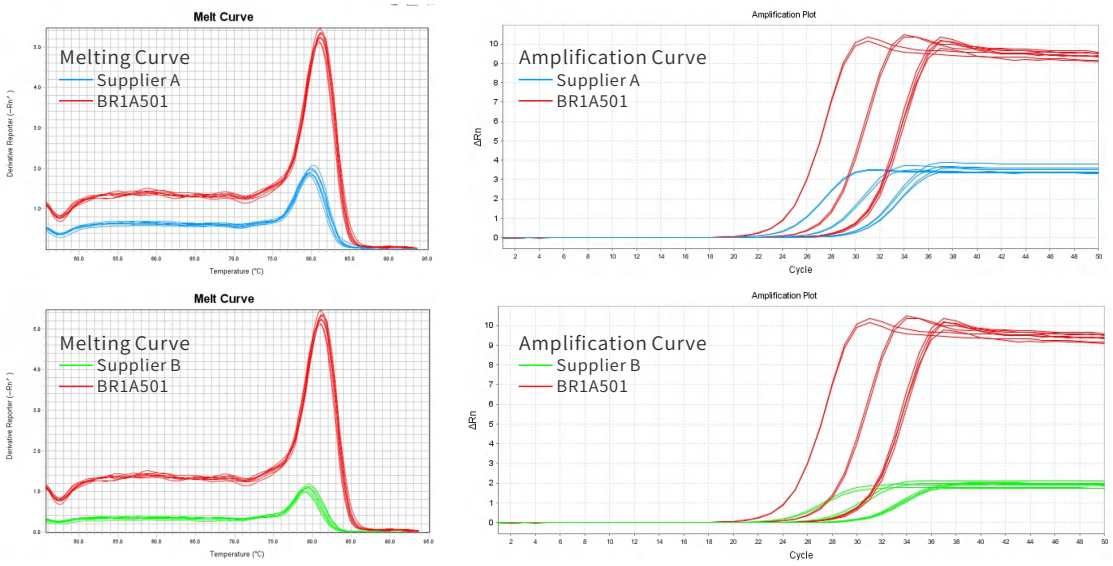
| Cat. No. | BR1A501 | Instrument | Hongshi SLAN-96P | Template | Human genomic DNA |
|---|---|---|---|---|---|
| Conc. | 125 pg/μL, 2 T; 12.5 pg/μL, 2 T; 1.25 pg/μL, 4 T; 10 μL/T . | | | | |
| Program | 95°C 5 min; 50 cycles (95°C 15 s, 56°C 45 s) ; 95°C 30 s; 45°C 2 min;<br>Melting curve Analysis: 45-95°C 0.06°C/s) . | | | | |




**CONCLUSION** Amplified on the SLAN-96 instrument, Biori' s BR1A501 demonstrated significantly stronger signals than Competitor A.

### Competitive Comparison Test 2

| Cat. No. | BR1A501 | Instrument | ABI 7500 | Template | Human genomic DNA |
|---|---|---|---|---|---|
| Conc. | 125 pg/μL, 2 T; 12.5 pg/μL, 2 T; 1.25 pg/μL, 4 T; 10 μL/T | | | | |
| Program | 95°C 5 min; 50 cycles (95°C 15 s, 56°C 45 s) ; 95°C 30 s; 45°C 2 min;<br>Melting curve Analysis:45-95°C 0.06°C/s) | | | | |




**CONCLUSION** On the ABI 7500 instrument, the amplification signal of Biori BR1A501 reagent is significantly better than Competitor A and B.

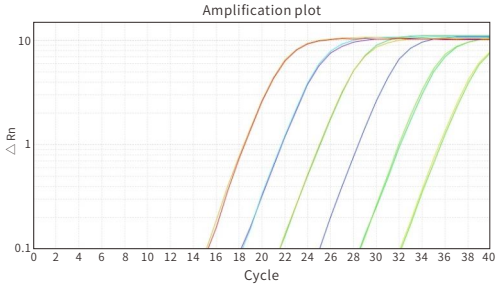
## FastAmpli SYBR qPCR Premix (Universal ROX)

Cat. No.: BR1E102

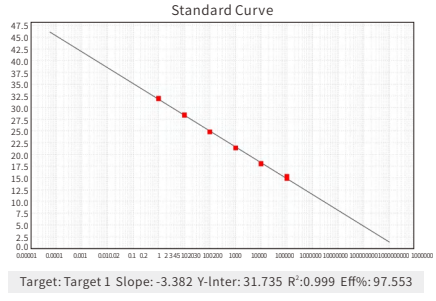
FastAmpli SYBR qPCR Premix (Universal ROX) is a special reagent for Real-Time PCR using SYBR Green®. It contains DNA polymerase screened by gene modification and can complete PCR reaction within 30 minutes. It can completely block polymerase activity at room temperature by antibody modification, which can effectively inhibit primer non-specific annealing or primer dimer non-specific amplification at room temperature and improve the specificity of amplification reaction. The optimized qPCR buffer greatly improves the amplification efficiency and detection sensitivity of qPCR reaction, and can obtain a good standard curve in a wide quantitative region for accurate quantification. This product contains universal ROX Reference Dye, suitable for all qPCR instruments, no need to adjust the concentration of ROX on different instruments.

### High Efficiency

| | | | |
|---|---|---|---|
| Cat. No. | BR1E102 | Instrument | ABI 7500 |
| Template | ASFV plasmid, 1× $10^5$-1 cps/μL, 10-fold serial dilution，5 μL/T. | | |
| Program | 95°C 1min；40 cycles (95°C 10 s，56°C 30 s)；95°C 30 s；45°C 2 min；melt curve analysis. | | |




● Fig. A Amplification plot



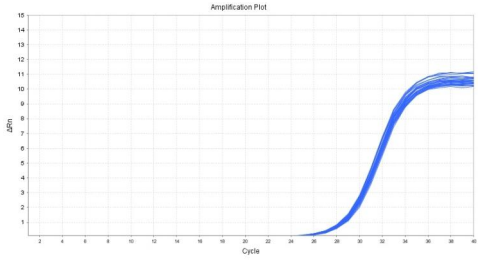

● Fig. B Standart curve

#### CONCLUSION

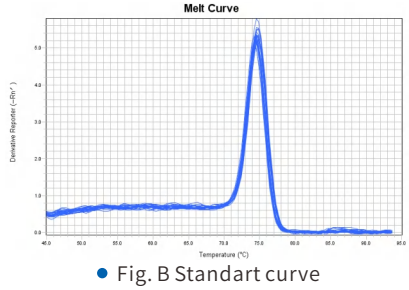
The results showed that the BR1E102 exhibits excellent linearity across a broad dynamic range and amplification efficiency approaches 97.55%.

### Stable well-to-well repeatability

| | | | |
|---|---|---|---|
| Cat. No. | BR1E102 | Instrument | ABI 7500 |
| Template | ASFV plasmid; 100 cps/μL，30 T，5 μL/T. | | |
| Program | 95°C 1min；40 cycles (95°C 10 s，56°C 30 s)；95°C 30 s；45°C 2 min；melt curve analysis. | | |




● Fig. A Amplification plot



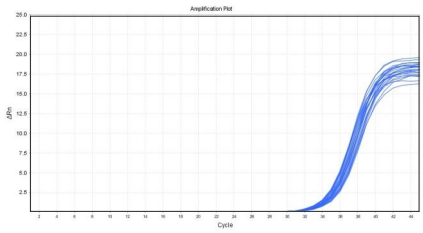

● Fig. B Standart curve

#### CONCLUSION

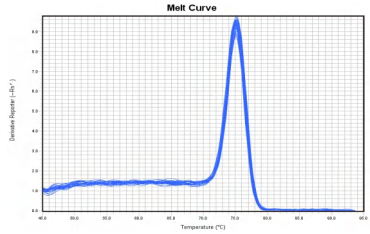
Amplification results showed a coefficient of variation (CV) of 0.83% for Ct values from 30 replicates. Consistent melting curve peak heights confirmed excellent amplification reproducibility of the BR1E102.

## High Sensitivity

| Cat. No. | BR1E102 | Instrument | ABI 7500 | Template | ASFV plasmid; 1 cps/μL，24 T，5 μL/T |
|---|---|---|---|---|---|
| Program | 95°C 1min；45 cycles (95°C 10 s，56°C 30 s)；95°C 30 s；45°C 2 min；melt curve analysis. | | | | |



● Fig. A Amplification plot



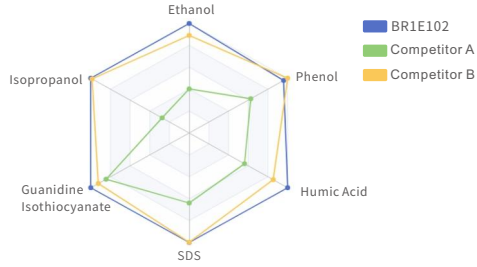

● Fig. B Standart curve

### CONCLUSION

Detection using 1 copy/μL ASFV plasmid template with BR1E102:Results demonstrated 100% detection rate, confirming BR1E102' s capability to detect single-copy templates with exceptional amplification sensitivity.

## High Tolerance With Inhibitors

| Cat. No. | BR1E102 |
|---|---|
| Template | Human genomic DNA;25 pg/μL，2 T；2.5 pg/μL，2 T；0.25 pg/μL，4 T；5 μL/T. |
| Program | 95°C 1min；40 cycles (95°C 10 s，56°C 30 s)；95°C 30 s；45°C 2min；melt curve analysis. |
| Instrument | Hongshi SLAN-96P |

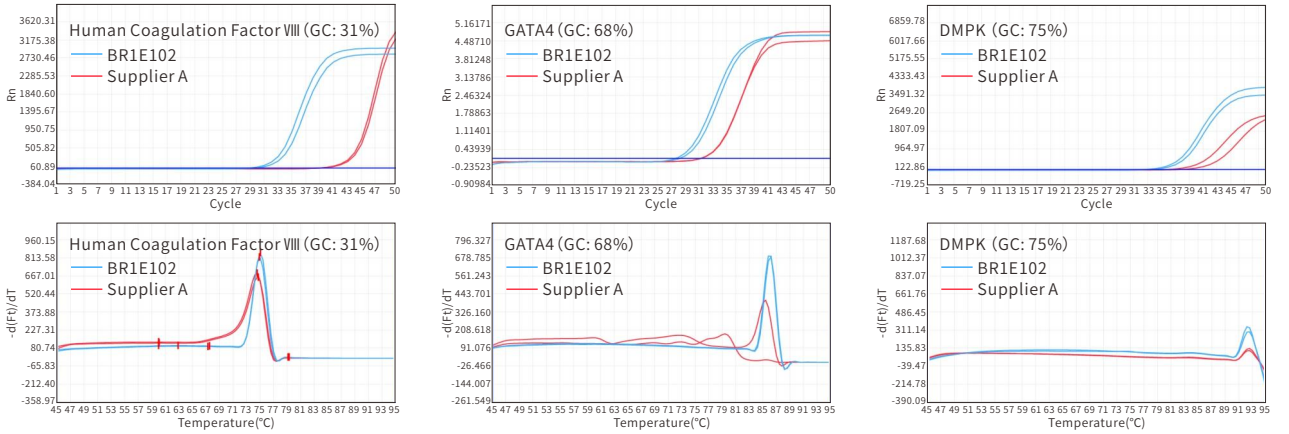



### CONCLUSION

In assays containing common PCR inhibitors, BR1E102 exhibited interference resistance comparable to Competitor B and significantly superior to Competitor A.

## Amplification of genes with varying GC content:

| Cat. No. | BR1E102 | Instrument | Hongshi SLAN-96P |
|---|---|---|---|
| Template | Human genomic DNA; 25 pg/μL，2 T；2.5 pg/μL，2 T；5 μL/T. | | |
| Program | 95°C 1min；50 cycles (95°C 10 s，60°C 30 s)；95°C 30 s；45°C 2 min；melt curve analysis. | | |

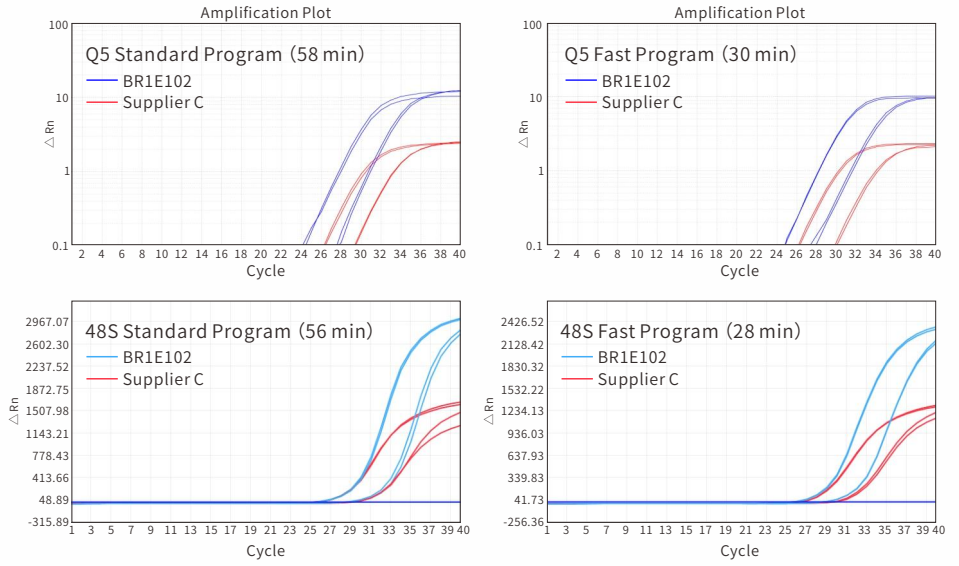



### CONCLUSION

Amplification of genes with varying GC content:BR1E102 master mix outperformed Competitor A in amplifying human coagulation factor VIII (F8) and GATA4 genes across divergent GC compositions.

## Compatible With Standard Program and Fast Program.

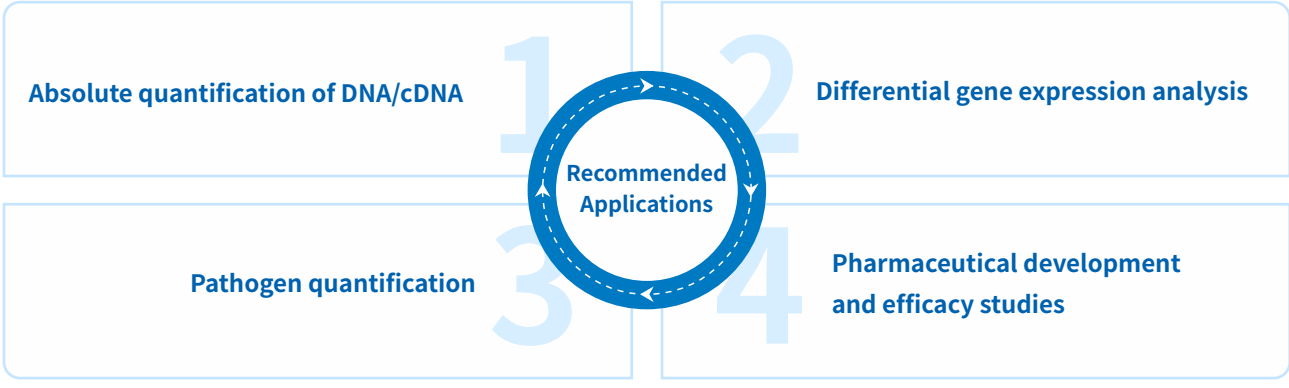
| Cat. No. | BR1E102 | Instrument | ABI QuantStudio™ 5/Hongshi SLAN-48 S |
|---|---|---|---|
| Template | Human genomic DNA; 25 pg/μL, 2 T; 2.5 pg/μL, 2 T; 5 μL/T. | | |
| Program | Standard Program: 95°C 1min; 40 cycles (95°C 10 s, 56°C 30 s); 95°C 15 s; 45°C 1min; melt curve analysis. | | |
| | Fast Program: 95°C 1min; 40 cycles (95°C 1 s, 56°C 10 s); 95°C 15 s; 45°C 1min; melt curve analysis. | | |




*Excludes melting curve analysis time.

## CONCLUSION

Results above showed that Biori BR1E102 was compatable with both standard and fast cycling programs on ABI QuantStudio™ 5 and Hongshi SLAN-48S instruments (ΔCt < 1). And performed higher efficiency than competitor C.



## Neoscript 1st cDNA Synthesis Premix for qPCR (+gDNA wiper)

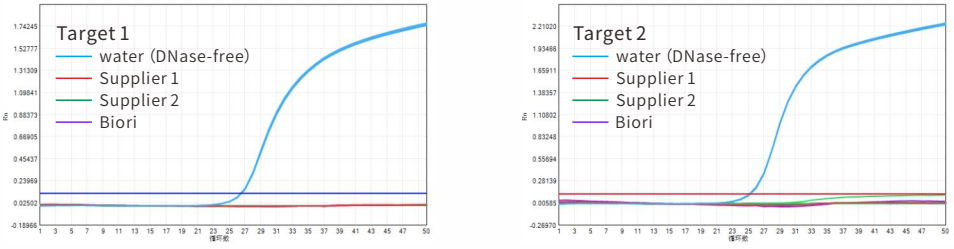
Cat. No.:BR1D301

### BR1D301 gDNA Removal Test

#### • Experiment Condition

Human genomic DNA was digested using gDNA Wiper Mix, followed by its inactivation. The processed human genomic DNA was then detected by qPCR using the 2×Robustart SYBR qPCR Premix (Universal ROX) (Cat#: BR1A501) reagent.

| Cat. No. | BR1D301 | Template | Human genomic DNA | Conc. | 2.5 ng /μL, 3 μL/T, 2 T |
|---|---|---|---|---|---|
| Program | Human gDNA digestion: 42°C 2 min;<br>DNase inactivation: Add DNase I inhibitor, 65°C 10 min;<br>qPCR Program: 50°C 2 min; 95°C 5 min; 50 Cycles (95°C 10 s, 55°C 40 s). | | | | |



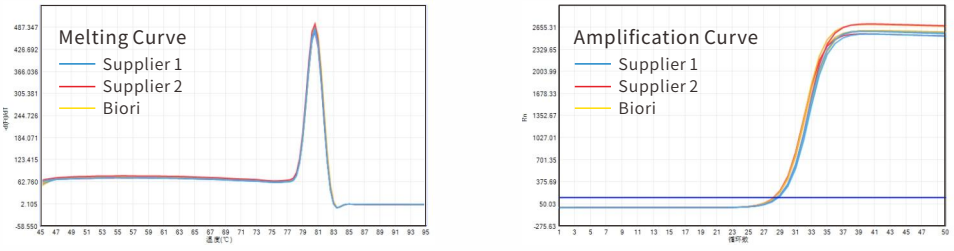

**CONCLUSION** Biori BR1D301 and competitors can completely remove 3.75 ng /T human gDNA.

### BR1D301 Reverse Transcription Efficiency Test

#### • Experiment Condition

After removing residual genomic DNA from human total RNA using gDNA Wiper Mix, reverse transcription was performed using Neoscript 1st cDNA Synthesis Premix. The obtained cDNA was detected by qPCR using Robustart SYBR qPCR Premix (Universal Rox) (Cat. No. BR1A501).

| Cat. No. | BR1D301 | Template | human total RNA | Conc. | 10 ng /μL, 2 T (2 μL/20 μL) |
|---|---|---|---|---|---|
| Program | 50°C 2 min;95°C 5 min;50 Cycles (95°C 10 s, 55°C 40 s);95°C 30 s;40°C 2 min;<br>Melting curve Analysis:45-95°C 0.06°C/s) | | | | |




**CONCLUSION** Biori BR1D301 demonstrates comparable performance to Competitor 1 and Competitor 2 in reverse transcription of human total RNA.

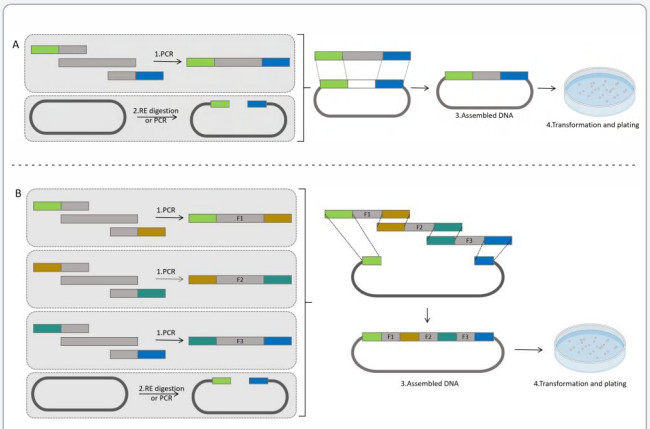
## 2× SeamLess Cloning Premix

Cat. No.:BR1C101

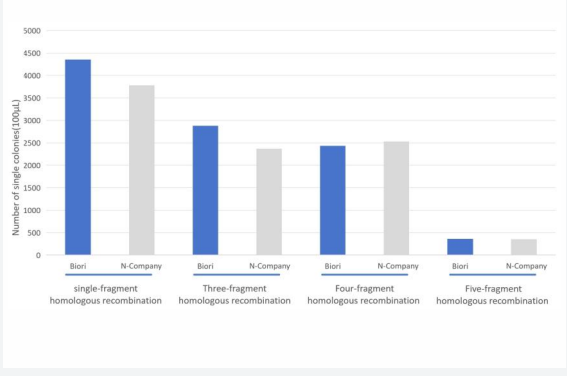
2× Seamless Cloning Premix is a universal all-in-one solution for rapid, directional and seamless DNA cloning of one or multiple fragments, up to 5 inserted fragments, into any vector with a large number of clones and high positive rate. 2× Seamless Cloning Premix excels particularly in rapid cloning, high-throughput cloning, seamless cloning and site-directed DNA mutagenesis.

### The principle of seamless cloning experiment

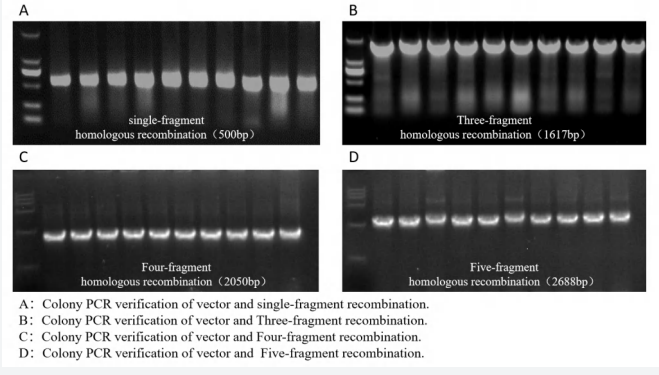
The ClonExpress technology is simple, fast, and highly efficient DNA seamless cloning technology. It enables rapid directional cloning of inserts into any site in any vector. Use any method to linearize the vector, and introduce the end sequence of the linearized vector at the 5' end of the insert forward/reverse amplification primer, so that the 5' and 3' ends of the PCR product have the same ends sequence (15 - 20 bp) as the linearized vector, respectively. The PCR product with the same sequence as the end of the vector and the linearized vector are mixed in a certain proportion. Under the catalysis of recombinase, the transformation can be performed at 50°C for 5 - 30 min to complete the directional cloning.




● Figure 1: The principle of seamless cloning experiment.




● Figure 2: The number of monoclones after homologous recombination of different quantities of fragments.




● Figure 3: Colony PCR verification after homologous recombination of different numbers of fragments.

### CONCLUSION

2× Seamless Cloning Premix can achieve seamless cloning of up to 5 insert fragments with a large number of single colonies and a high positive rate (> 95%).

## 2× Super-Fidelity Master Mix (Dye Plus)

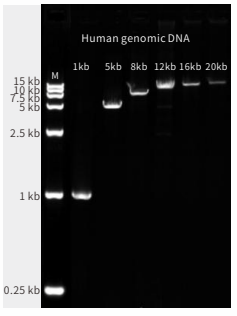
Cat. No.:BR3M121

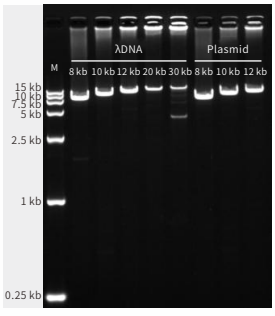
2× Super-Fidelity Master Mix is a ready-to-use high-fidelity PCR premix. It adopts a genetically engineered hot-start high-fidelity DNA polymerase, which has extremely high DNA affinity and processivity. It is well compatible with complex templates and partially degraded templates, the fidelity is 154-fold higher than that of Taq DNA Polymerase. The reagent contains unique extension factors and specificity-promoting factors, which greatly improve the long-fragment amplification ability, specificity and yield.

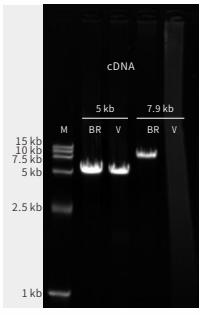
### Components

| Components | Cat. No. | Spec. |
|---|---|---|
| 2× Super-Fidelity Master Mix (Dye Plus) | BR3M121-79 | 0.1 mL |
| | BR3M121-71 | 1 mL |
| | BR3M121-72 | 5× 1 mL |
| | BR3M121-74 | 15× 1 mL |
| 2× Super-Fidelity Master Mix | BR3M121-09 | 0.1 mL |
| | BR3M121-01 | 1 mL |
| | BR3M121-02 | 5× 1 mL |
| | BR3M121-04 | 15× 1 mL |

### Broad Template Compatibility



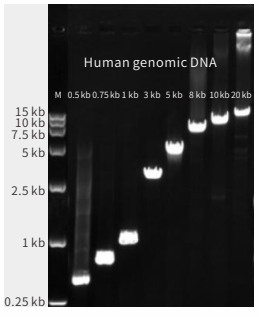




### CONCLUSION

PCR amplification was performed using BR3M121 on four different types of DNA templates, as shown in the figures above. Excellent amplification performance was observed across all template types. (Also compatible with other diverse templates such as rice leaf, maize tassel, yeast, blood DNA, etc.).

### Broad Amplicon Length Compatibility

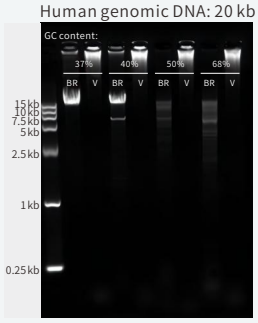



### CONCLUSION

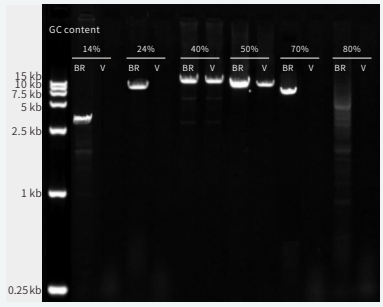
BR3M321 is compatible with the amplification of products of varying lengths from 200 bp to 20 kb.

## Broad GC Content Compatibility

Human genomic DNA: 20 kb




- Figure 1: Amplification of a complex region (10 kb fragment with 25%-67% GC contents) and a 20 kb fragment (37%-40% GC) using BR3M121 and Company V reagents.

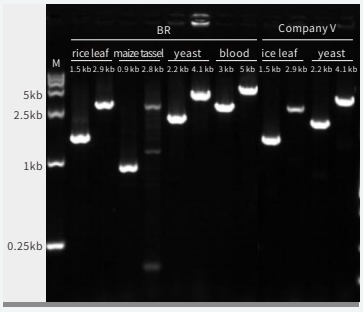



- Figure 2: Amplification of simple region fragments with GC contents ranging from 14% to 80% using BR3M121 and Company V reagents.

### CONCLUSION

The figures show BR3M121 delivered robust amplification performance across diverse GC ratios, outperforming Company V, and was compatible with templates of 20%-70% GC contents.

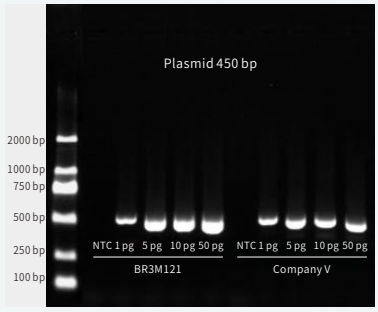
## Robust Performance with Crude Samples




### CONCLUSION

Both BR3M121 and Company V reagents showed good amplification on crude DNA templates from rice leaf, maize tassel, yeast, and whole blood, but BR3M121 demonstrated higher amplification efficiency than the other.

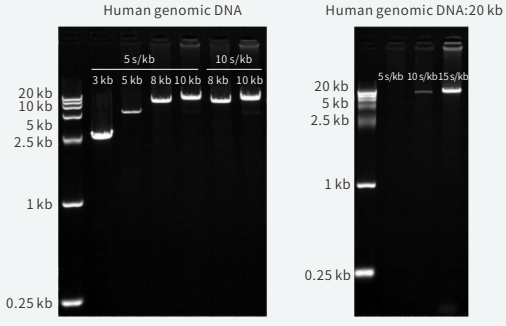
## High Sensitivity




### CONCLUSION

Both BR3M121 and Company V reagents showed good amplification on crude DNA templates from rice leaf, maize tassel, yeast, and whole blood, but BR3M121 demonstrated higher amplification efficiency than the other.

## High Amplification Speed




### CONCLUSION

BR3M121 demonstrated high amplification speed: amplification of 10 kb target can be finished at the speed of 5 s/kb, while 20 kb target at 10 s/kb.

## High Amplification Efficiency

| Sample-Input Amount | Amplification Reagent-30 cycles | Post-Amplification Concentration by Qubit (ng/μL) |
|---|---|---|
| Human genomic DNA 100 ng | BR3M121 | 95 |
| Human genomic DNA 100 ng | Company V | 41.6 |
| λ DNA 10 ng | BR3M121 | 65 |
| λ DNA 10 ng | Company V | 42.3 |
| Plasmid10 ng | BR3M121 | 80 |
| Plasmid 10 ng | Company V | 35 |
| Com Ear(Crude Extract)2 μL | BR3M121 | 72 |
| Com Ear(Crude Extract)2 μL | Company V | 31 |
| Human cDNA 100 ng | BR3M121 | 70 |
| Human cDNA 100 ng | Company V | 22.6 |

### CONCLUSION

Results above shows that BR3M121 performed higher amplification efficiency with different samples than Company V.

## Biori ® NGS DNA Clean Beads

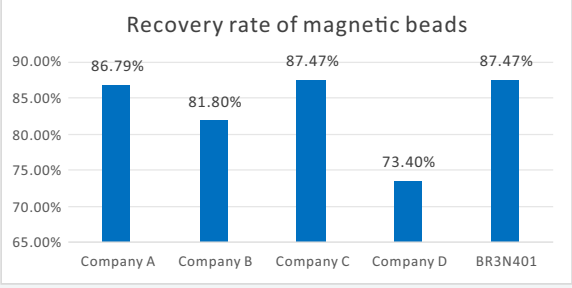
Cat. No.:BR3N401

Biori ® NGS DNA Clean Beads adopts Ultrasmall-diameter magnetic beads and combined with an optimized buffer system, compatible with DNA purification and size selection for fragment library preparation for Next Generation Sequencing. This product is used in the same way as AMPure XP Beads.

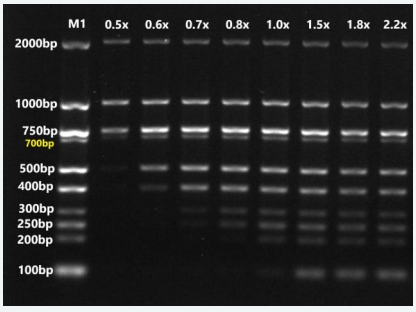
### Components

| Components | Cat. No. | Spec. |
|---|---|---|
| Biori ® NGS DNA Clean Beads | BR3N401-02 | 5 mL |
| | BR3N401-05 | 60 mL |
| | BR3N401-06 | 450 mL |

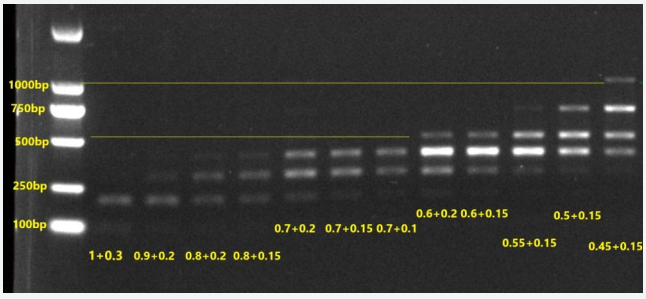
### Excellent library recovery rate




### Unilateral size selection performance




### Broad Template Compatibility




### CONCLUSION

Magnetic beads demonstrated excellent unilateral size selection performance in library purification during next-generation sequencing (NGS) library preparation.

## Corporate Mission

Protecting Life and Health
Creating a Better Life

## Corporate Vision

Leader in the Life Sciences Field

## Core Values

Integrity Responsibility
Proactiveness Innovation

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