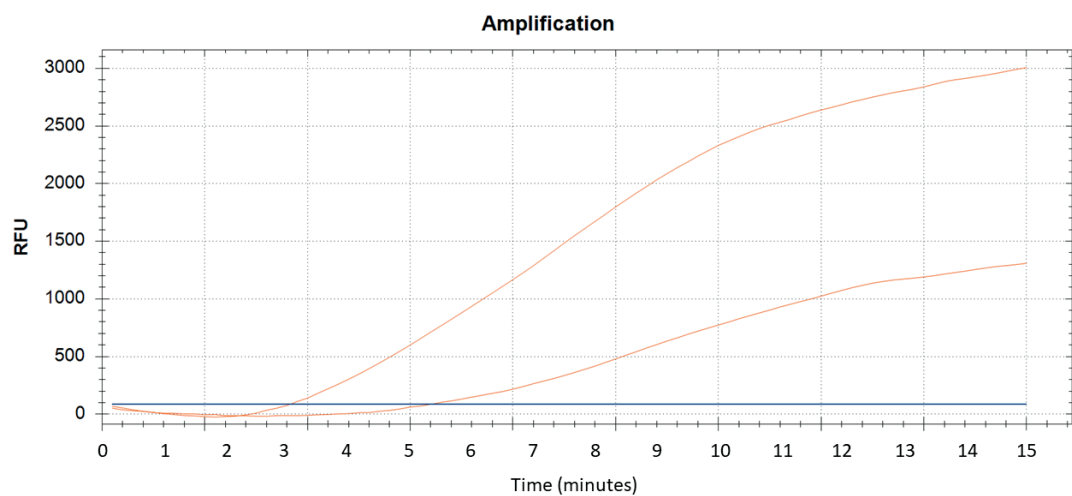
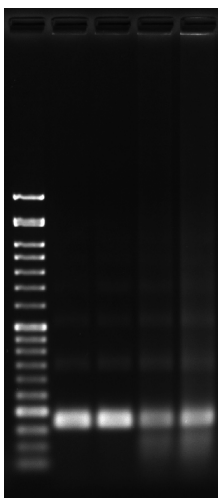


biotechrabbit RPA Products

What is Recombinase Polymerase Amplification (RPA)?

Recombinase Polymerase Amplification (RPA) is an isothermal DNA and RNA amplification technology. Unlike traditional methods, RPA eliminates the need for thermal cycling, making it faster and more accessible for field and lab applications.

- **Isothermal Amplification:** Reaction at a constant temperature (37–42°C), no need for thermocyclers
- **Rapid Results:** Amplification can be achieved in as little as 10–20 minutes
- **High Sensitivity:** Low Limit of Detection: minimum 100 DNA or RNA copies
- **Versatile Applications:** Suitable for research, diagnostics, and point-of-care testing



Left: 168 bp amplicon generated with biotechrabbit's RPA Basic Master Mix shown in an agarose gel.

Right: Amplification efficiency and speed demonstrated with biotechrabbit's RPA Exo Master Mix.

Feature	RPA	PCR
Temperature	Isothermal (37–42°C)	Thermal cycling (typically 95°C, 60°C, 72°C)
Speed	Results in 10–20 minutes	1–2 hours
Equipment	Minimal (e.g., heating block)	Requires thermal cycler
Portability	Ideal for field testing	Limited portability
Sensitivity	High sensitivity, few DNA/RNA copies needed	High, but often requires clean samples
Applications	Point-of-care, diagnostics, field work	Lab-based diagnostics and research

Product Details

Product Code	Name	Quantity
BR1500201	LYO-ready T6 UvsX DNA Recombinase, 5 mg/ml	100 µg
BR1500202	LYO-ready T6 UvsX DNA Recombinase, 5 mg/ml	500 µg
BR1500301	LYO-ready T4 UvsY Protein, 2 mg/ml	100 µg
BR1500302	LYO-ready T4 UvsY Protein, 2 mg/ml	500 µg
BR1500101	LYO-ready Exonuclease III, 100 U/µl	10,000 U
BR1500102	LYO-ready Exonuclease III, 100 U/µl	25,000 U
BR1500103	LYO-ready Exonuclease III, 100 U/µl	100,000 U
BR1500401	LYO-ready RB69 Gene 32 Protein, 10 mg/ml	500 µg
BR1500402	LYO-ready RB69 Gene 32 Protein, 10 mg/ml	1,000 µg

Product Code	Name	Reactions
BC1600100	2X RPA Basic Master Mix	8 reactions
BC1600101	2X RPA Basic Master Mix	96 reactions
BC1600200	2X RPA Exo Master Mix	8 reactions
BC1600201	2X RPA Exo Master Mix	96 reactions
BC1600300	2X RT-RPA Basic Master Mix	8 reactions
BC1600301	2X RT-RPA Basic Master Mix	96 reactions
BC1600400	2X RT-RPA Exo Master Mix	8 reactions
BC1600401	2X RT-RPA Exo Master Mix	96 reactions

Exo vs. Non-Exo Mixes

Exo Master Mixes

- Enable real-time fluorescence detection for quantitative analysis.
- Ideal for sensitive applications like pathogen load monitoring.

Non-Exo (Basic) Master Mixes

- Designed for end-point detection via colorimetric or gel-based methods.
- Cost-effective for simpler workflows.