

# HighPrep PCR

Magnetic bead-based post PCR cleanup reagent designed for efficient DNA purification and consistent DNA fragment size selection for NGS

**Hassle Free Replacement of the Leading SPRI Bead Based Reagent for Just a Fraction of the Cost**

## Description

HighPrep PCR is a paramagnetic bead-based reagent that enables efficient purification and precise size selection of amplicons, NGS libraries, and DNA fragments. Its customizable bead-to-sample ratio allows for the selection of DNA fragments within a desired size range, ensuring consistent and high-quality results. The purification process effectively removes contaminants such as salts, primers, primer dimers, and unincorporated dNTPs, while selectively binding the DNA fragments to the magnetic beads. HighPrep PCR's purification and size selection ensure the recovery of highly purified DNA, ready for immediate use in a variety of downstream applications.

## Benefits

- **High DNA Recovery Efficiency:** Ensures high recovery of amplicons, sequencing libraries, and DNA fragments greater than 100 bp post-cleanup
- **Efficient Contaminant Removal:** Facilitates effective purification by eliminating residual primers, nucleotides, and other impurities from amplicons, sequencing libraries, and DNA extracts
- **Accurate Size Selection:** Allows for precise and reproducible DNA size selection
- Suitable for both single-stranded and double-stranded DNA
- **Streamlined Protocol:** Utilizes a magnetic bead-based method, eliminating the need for centrifugation or filtration, which simplifies the workflow and reduces processing time
- **Multi-Format Adaptability:** Compatible with single-tube, 96-well, and 384-well formats, supporting low- to high-throughput sample processing
- **Scalable and Automation-Compatible:** Designed for scalability and can be seamlessly integrated into automated liquid handling systems, optimizing high-throughput workflows

## Applications

- PCR purification
- Library prep cleanup (Next Generation)
- DNA size selection for NGS
- Mutation detection
- Genotyping (SNP detection)
- Cloning
- Primer walking

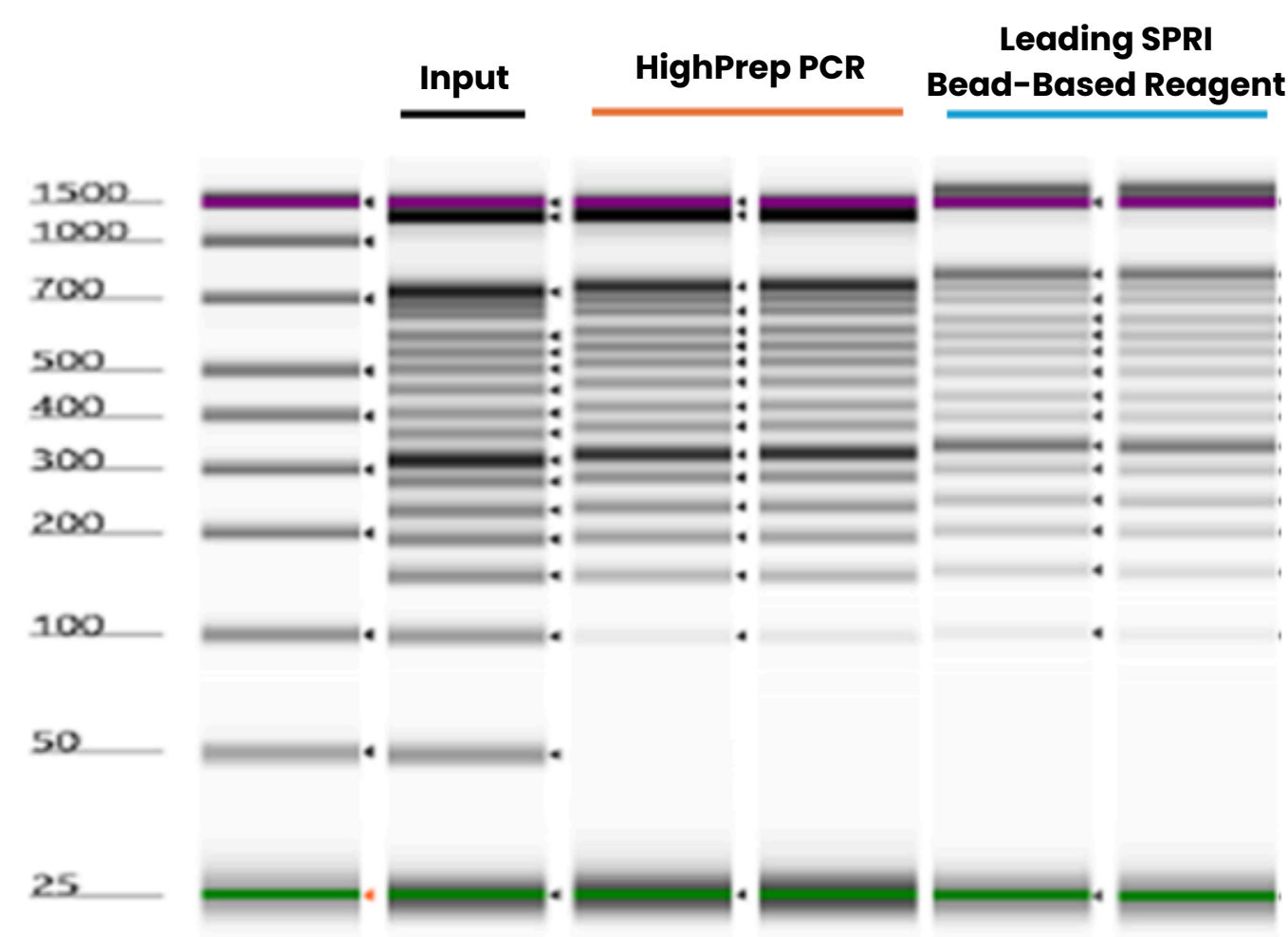
## Ordering Information

HighPrep PCR comes in 4 sizes:  
5 mL, 50 mL, 250 mL and 500 mL

Catalog Number	Product
AC-60005	HighPrep PCR (5 mL)
AC-60050	HighPrep PCR (50 mL)
AC-60250	HighPrep PCR (250 mL)
AC-60500	HighPrep PCR (500 mL)



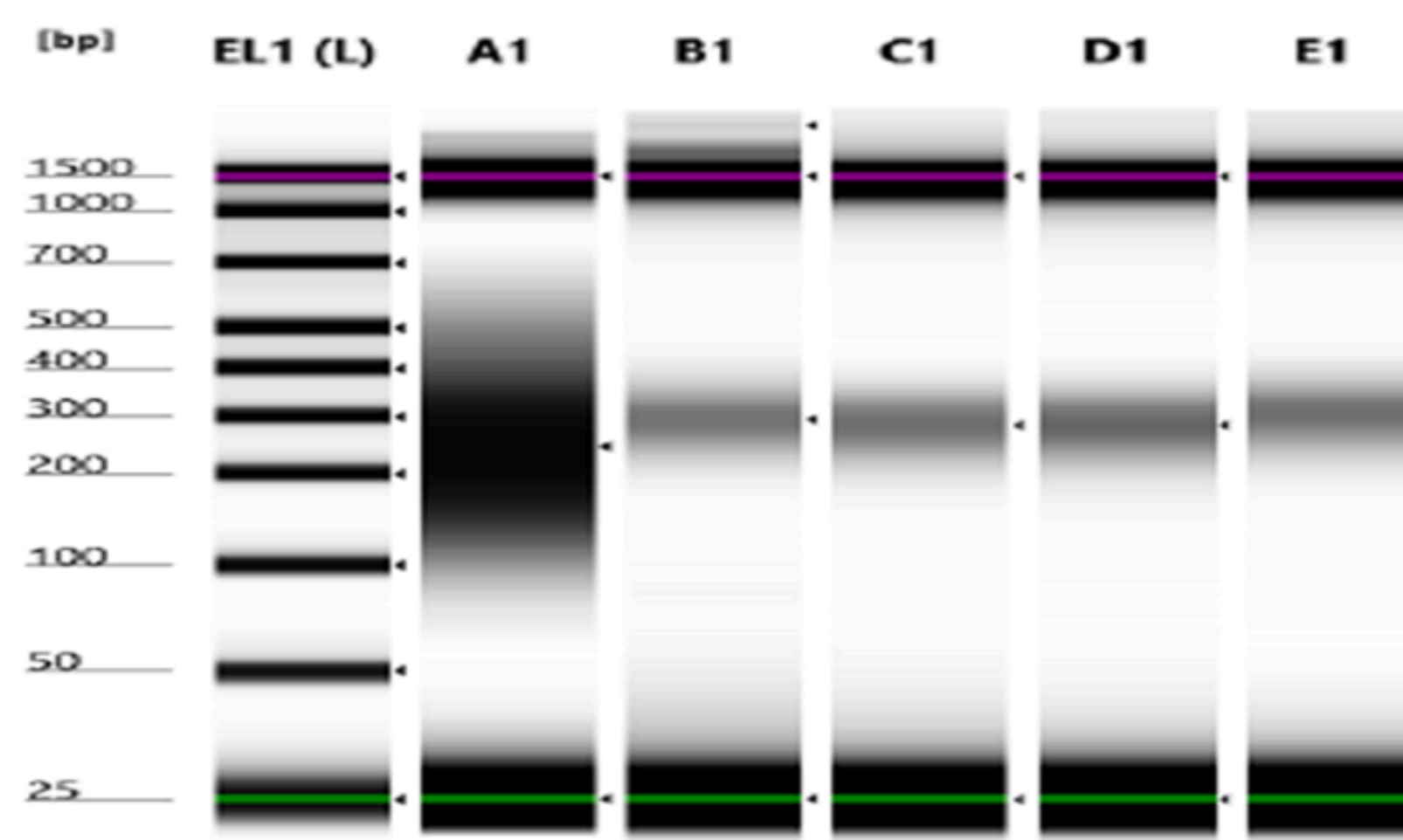
## DNA Cleanup



**Figure 1: Removal of 50 bp DNA fragment.** About 10  $\mu$ L of 50 bp DNA ladder was purified with HighPrep PCR and the Leading SPRI Bead-Based Reagent using a bead ratio of 1.8x following the manufacturer's protocol. Fragments above 100 bp were retained by both reagents and the 50 bp DNA fragment was removed.

## DNA Size Selection

### Selection of 250 bp – 350 bp DNA Fragment



Lane	Sample	Average DNA size (bp)
A1	Input Sheared gDNA	100-700
B1	HighPrep PCR - 1	295
C1	HighPrep PCR - 2	285
D1	Leading SPRI Bead-Based Reagent - 1	287
E1	Leading SPRI Bead-Based Reagent - 2	301

**Figure 2: Efficient double-sided DNA size selection using HighPrep PCR as a direct replacement for the Leading SPRI Bead-Based Reagent.** Agilent TapeStation fragment analysis of 250-350 bp DNA size selection (0.75x/0.2x) from sheared genomic DNA. The same size selection ratio was applied for both reagents.

**Get your Free Sample!**

- Request your sample today at: [www.magbiogenomics.com/request-a-sample](http://www.magbiogenomics.com/request-a-sample)
- Place an order directly at: [orders@magbiogenomics.com](mailto:orders@magbiogenomics.com)
- For additional details about the HighPrep PCR product, visit: [www.magbiogenomics.com/Highprep-PCR.html](http://www.magbiogenomics.com/Highprep-PCR.html)