



# illumina Purification Beads

Fast, easy, and reliable DNA purification from saliva, whole blood, dried blood spots, or crude bacterial lysates.<sup>1-3</sup>



Use for various DNA purification needs



Maximize gDNA yield



Store at room temperature

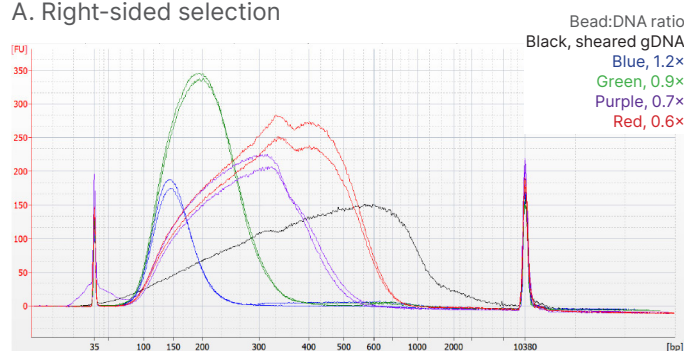


Complete with only 20 min hands-on time

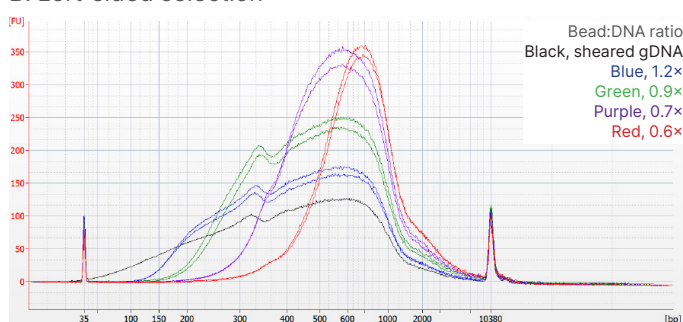
## Maximize purity, yield, and convenience

Having sufficient high-purity DNA is essential to successful next-generation sequencing (NGS) studies. Illumina Purification Beads effectively isolate DNA and remove unwanted contaminants, including proteins, salts, and primers at a level equal to, or better than, other on-market beads, including AMPure XP reagents for DNA purification, library prep clean-up, and consistent size selection (Figure 1). Illumina Purification Beads fit seamlessly into most DNA purification protocols (Table 1). When used with Illumina solutions, they offer the convenience of a single supplier for your library prep, sequencing, and analysis needs.

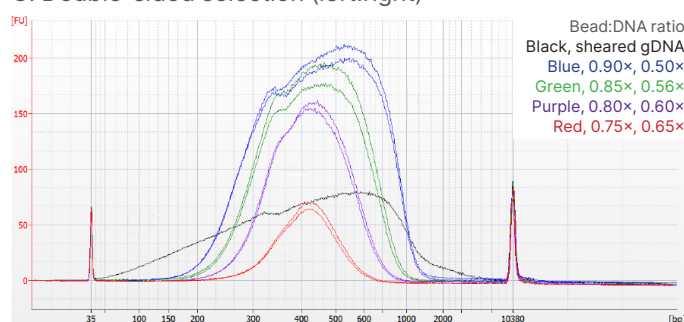
A. Right-sided selection



B. Left-sided selection



C. Double-sided selection (left:right)



**Figure 1: Illumina Purification Beads produce identical size selection of sheared genomic DNA as AMPure XP beads**—Mechanically sheared gDNA (black line) was purified using various volume ratios of beads to DNA for size selection using both Illumina Purification Beads and AMPure XP beads. Color indicates bead:DNA ratio, which is shown in the same color for both bead types. Similar concentration volumes were run on an Agilent Bioanalyzer system.

**Table 1: Recommended purification beads for Illumina library preparation solutions<sup>a</sup>**

Kits including Illumina Purification Beads			
Illumina DNA Prep	Illumina DNA PCR-Free Prep	Illumina DNA Prep with Exome 2.5 Enrichment	Illumina Cell-Free DNA Prep with Enrichment
Illumina Complete Long Reads	COVIDSeq™ Test RUO	COVIDSeq Assay	Illumina Microbial Amplicon Prep
Kits recommending AMPure XP beads, not verified for use with Illumina Purification Beads, but expected to work as recommended; Illumina Purification Beads purchased separately			
Illumina RNA Prep with Enrichment	Illumina Stranded Total RNA Prep	Illumina Stranded mRNA Prep	TruSeq™ RNA Exome
TruSeq RNA Library Prep Kit v2	TruSeq RNA Library Prep Kit v2	TruSeq Stranded mRNA	
Kits verified for use with Illumina Purification Beads but do not include beads; Illumina Purification Beads purchased separately			
Illumina DNA Prep with Enrichment	Nextera™ XT DNA		
Kits verified for use with Illumina Purification Beads but provided with Sample Purification Beads			
TruSeqDNA Nano	TruSeq DNA PCR-Free		

a. For a complete list of Illumina library prep solutions, visit [illumina.com/products/by-type/sequencing-kits/library-prep-kits.html](https://www.illumina.com/products/by-type/sequencing-kits/library-prep-kits.html).

## Extensively tested

Illumina Purification Beads represent the latest development in DNA purification from Illumina. They replace AMPure XP beads and Sample Purification Beads in Illumina DNA and RNA library preparation kit protocols, without impacting the protocol or performance.

To demonstrate equivalent performance of Illumina Purification Beads, performance in five different Illumina DNA library preps was compared to that of the Sample Purification Beads. Illumina Purification Beads generated equal total library yield and identical insert size distribution. Sequencing data show equivalent metrics for single-nucleotide variant (SNV) and indel recall and precision, fragment length median, and genome coverage.

Experiments evaluating Illumina Purification Bead performance in the Illumina DNA Prep, (M) Tagmentation, workflow used a total of 18 libraries sequenced on a NovaSeq™ 6000 System using an S4 flow cell. Secondary analysis sequencing metrics demonstrated equivalent performance of Illumina Purification Beads and Sample Purification Beads.<sup>4</sup>

### Ordering information

Product	Catalog no.
Illumina Purification Beads, 30 ml	20119944
Illumina Purification Beads, 100 ml	20060057
Illumina Purification Beads, 400 ml	20060058

### Order today

Contact your local sales representative for a quote or visit [myillumina.com](https://myillumina.com) to order online.



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### References

1. Illumina. Illumina DNA Prep Reference Guide. [https://support.illumina.com/content/dam/illumina-support/documents/documentation/chemistry\\_documentation/illumina\\_prep/illumina-dna-prep-reference-guide-1000000025416-09.pdf](https://support.illumina.com/content/dam/illumina-support/documents/documentation/chemistry_documentation/illumina_prep/illumina-dna-prep-reference-guide-1000000025416-09.pdf). Published June 2020. Accessed January 17, 2024.
2. Illumina. Illumina DNA Prep Microbial Colony Extraction Demonstrated Protocol. [https://support.illumina.com/content/dam/illumina-support/documents/documentation/chemistry\\_documentation/illumina\\_prep/illumina-dna-prep-colony-extraction-protocol-1000000035294-02.pdf](https://support.illumina.com/content/dam/illumina-support/documents/documentation/chemistry_documentation/illumina_prep/illumina-dna-prep-colony-extraction-protocol-1000000035294-02.pdf). Updated October 2023. Accessed January 17, 2024.
3. Illumina. Direct bacterial colony sequencing. <https://www.illumina.com/content/dam/illumina/gcs/assembled-assets/marketing-literature/illumina-dna-prep-direct-colony-app-note-m-gl-01605/ilmn-dna-prep-direct-colony-app-note-m-gl-01605.pdf>. Accessed January 17, 2024.
4. Access example sequencing run and project data in BaseSpace™ Demo Data NovaSeq S4: Illumina DNA Prep with Illumina Purification Beads (18 reps of NA12878). <https://basespace.illumina.com/datacentral>. Accessed January 17, 2024.