

INTRODUCTION

PureBind beads are superparamagnetic non-aggregate iron oxide microspheres made with a specifically engineered outer-layer. The beads are uniform and stable for capturing and purifying DNA and RNA targets. This design enables faster binding, with high sensitivity and selectivity, in both manual and automated research applications.

HIGHLIGHTS

- **Superior performance** – optimized and designed to match or outperform other competitors
- **Superior capacity and yield** – large surface area and high-binding capacity for rapid and efficient target purification
- **Superior purity** – stable and smooth spherical surface for clean purification from complex matrix
- **Eco-friendly** – no costly columns required and minimal use of plastics

APPLICATION

- Genomic DNA Isolation
- Mitochondrial DNA Isolation
- Total RNA isolation
- Viral DNA/RNA Isolation

High Integrity and Quality DNA Yield

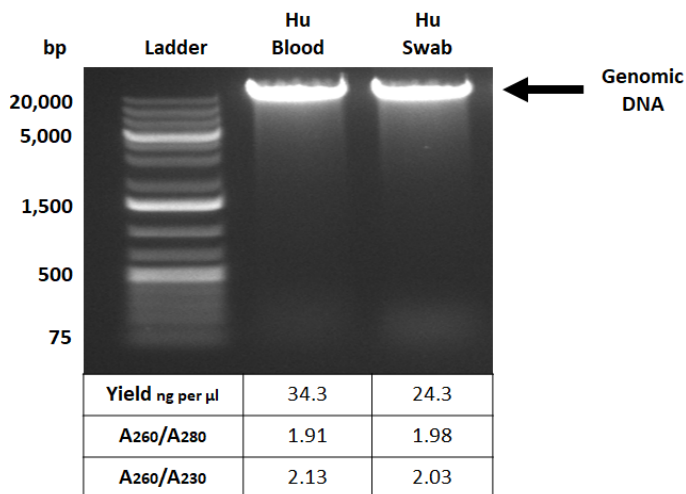


Figure 1. Example of high quality weight genomic DNA isolated using PureBind beads.

PureBind beads are suitable for binding to genomic DNA when added to a heterogeneous suspension. This interaction is based on the specific affinity of the ligand on the surface of the PureBind beads. The DNA isolated using PureBind Beads is of high integrity and high molecular weight.

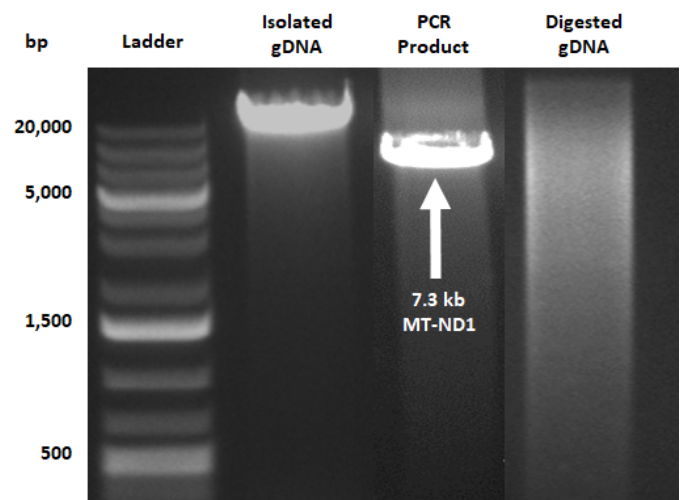


Figure 2. Example of high quality genomic DNA isolated using PureBind beads.

PureBind beads are highly stable in various biological samples, resulting in high yields of genomic DNA with minimal proteins, nucleases, and other cellular contaminants that can potentially interfere with downstream applications (e.g. PCR, restriction enzyme digestions).

Optimized to Bind to Virus DNA and RNA

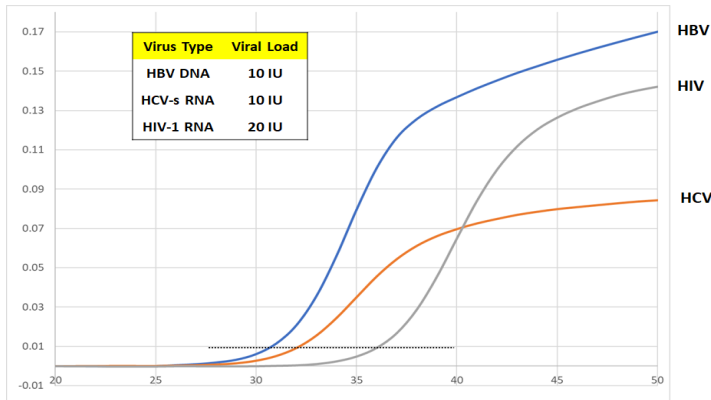


Figure 3. Example of viral DNA and RNA sensitivity and low detection limits using PureBind Beads

PureBind beads are convenient for binding to virus DNA and RNA from human plasma prior to molecular detection. PureBind beads have been optimized to bind to virus DNA and RNA with high sensitivity, allowing for a low detection limit.

Compatible with Automated Platforms

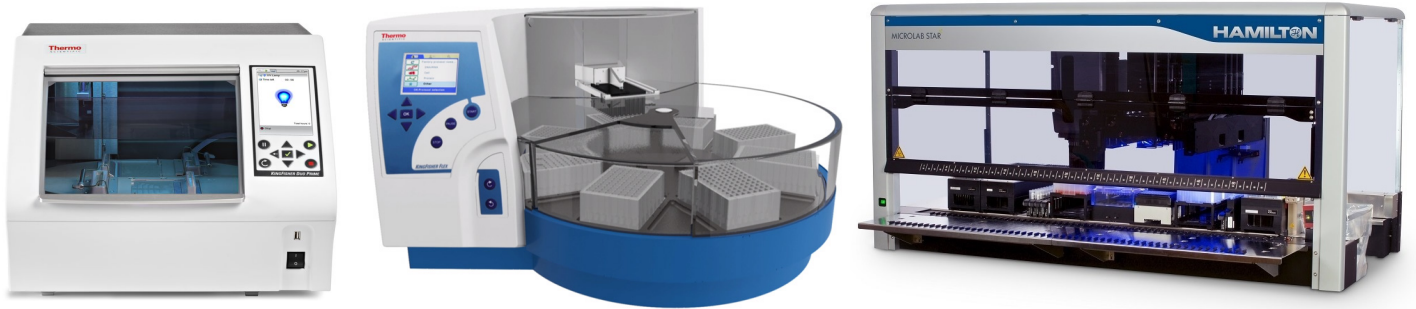


Figure 4. Examples of applicable automated platforms that are compatible with PureBind beads

PureBind beads provide are well-suited for automated molecular assays and has been developed to meet the high-requirements for magnetic bead-based sample preparation for manual and automated research applications. The beads have been proven to be compatible with the KingFisher Duo Prime System, KingFisher Flex System, and the Hamilton MicroLab Star Workstation.

Visit our website: www.oceannanotech.com to view our complete line of products and innovative sample preparation kits.