

PCR Clean-Up

Magnetic Bead-Based Purification of PCR Products

The **Galenvs PCR Clean-Up kit** offers a rapid and efficient method of nucleic acid purification following enzymatic reactions such as PCR or other processes such as restriction digests or ligation reactions. Purification of DNA is achieved through magnetic bead-based capture and subsequent elution into clean buffer. Functionalized magnetic beads are at the core of the Galenvs PCR Clean-Up kit, which contains optimized buffers for DNA binding, washing and elution.

The Galenvs PCR Clean-Up kit alleviates the need for centrifugation steps and separate collection tubes – in contrast to standard column-based kits. In addition, the **Galenvs PCR Clean-Up kit capture efficiency is >98%** of sample DNA in the **size range of 100 bps – 10 kbps**. Furthermore, the purified sample can be **concentrated in volumes as low as 25 μ L**, compared to column-based kits which often necessitate larger elution volumes. The Galenvs PCR Clean-Up kit performance is highlighted in Figure 1, demonstrating high purification efficacy at various fragment sizes. **Sample processing is completed in less than 10 minutes**, yielding high purity and efficient recovery of DNA as shown in table 1.

Table 1 – DNA purification of 100 bp ladder as sample input at various concentrations. Using a final elution volume of 25 μ L, quantification was performed by spectrophotometer, yielding >98% recovery and negligible protein, salt or alcohol contamination.

Input Sample	Quantity (ng/ μ L)	A260/A280	A260/A280
500 ng	19.7	1.84	1.82
250 ng	9.8	1.77	1.74

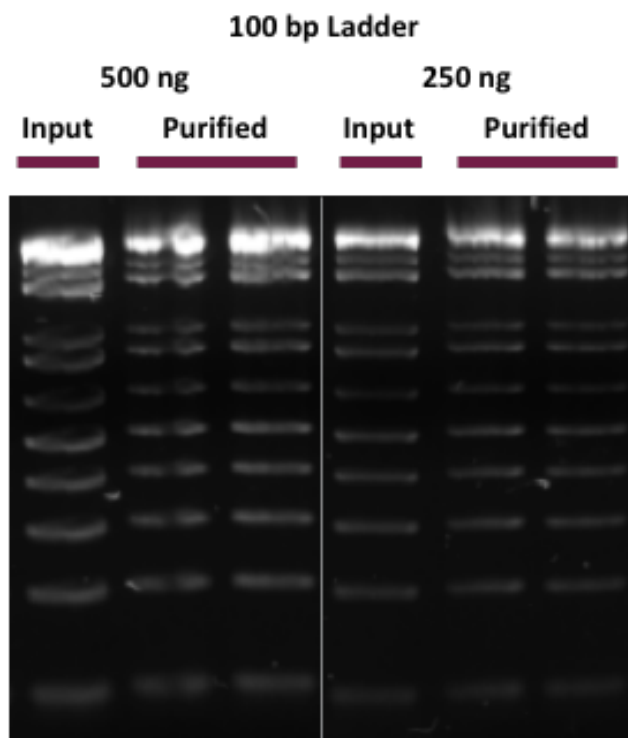


Figure 1 – Agarose gel electrophoresis of 100 bp ladder that is captured and purified using the Galenvs PCR Clean-Up kit. Final elution volume was 25 μ L. As demonstrated by band intensities, DNA fragments from 100 bps – 10 kbps are completely recovered. Capture and release efficiency is also consistent at total input DNA quantity of 500 ng or 250 ng. This further confirms the DNA purification efficacy at various sample concentrations and fragment sizes.

Superior Performance:

- Rapid • Cost-Effective • Low Elution Volumes
- Highly Efficient • Customizable