Magnetic beads for molecular biology

RUO

LibPrep Beads
for size-selective DNA extraction.

LibPrep magnetic beads are designed for size-selective isolation of DNA fragments.

Application:

1) Preparation of DNA libraries for next generation sequencing (NGS).
2) Purification of PCR products.

Features:
+ High selectivity
+ Fast and simple protocols
+ Compatible with different types of automatic stations for the isolation of nucleic acids.

Pack size, ml	REF	Price, € net
50	MB-LP-50	220
100	MB-LP-100	400
500	MB-LP-500	1600
1000	MB-LP-1000	2880

Specifications	
Concentration	2 mg/ml
Composition	γ-Fe_2O_3–SiO_2–COOH, Binding Buffer
Surface functional groups	–COOH
Concentration of funcitonal groups	1.2 mmol/g
Bead type	Controlled aglomerates of nanospheres
Average particle size	1 μm
Sedimentation stability	3–5 min
Time of full magnetic separation	< 1 min*
Magnetization type	Superparamagnetic
Magnetization value	~40 emu/g
Storage conditions	2–8 ºC
Transportation conditions	2–25 ºC
Shelf life	12 months

* Depends on the isolation conditions. Magnetic rack is recommended

**The selection efficiency and required input of DNA depends on the samples

MATERIALS REQUIRED BUT NOT SUPPLIED

• Ethanol
• Magnetic rack
• Variable pipettors
• TE Buffer
• Polypropylene tubes
• Pipettor tips
• Purified water

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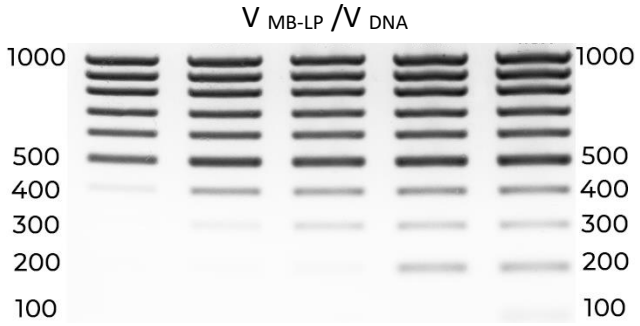
INSTRUCTIONS FOR USE

1. Mix LibPrep sorbent and a DNA sample solution in the required ratio (V_{EM-LP} / V_{DNA} = 0.5–1.5).

V_{EM-LP} / V_{DNA}	Extractable DNA fragment size
0.5x	> 300 bp
0.6x	> 200 bp
1.0x	> 100 bp



2. Incubate the mixture for 5 min at room temperature (20–25 °C).
3. Place the tube in a magnetic rack and remove the supernatant after separation.
4. Add 150 µL of cold 85% ethanol (freshly prepared) to the tube.
5. Shake the tube sightly for 30 seconds.
6. Place the tube in a magnetic rack and remove the supernatant after separation.
7. Repeat steps 4–6.
8. Incubate the open tube for 10 minutes at room temperature to dry the precipitate.
9. Elute DNA with 15 µl of purified water or TE-buffer, incubate for 5 min at room temperature (20–25 °C).
10. Place the tube in a magnetic rack and, after separation, transfer the supernatant containing the resulting DNA sample to a new tube.