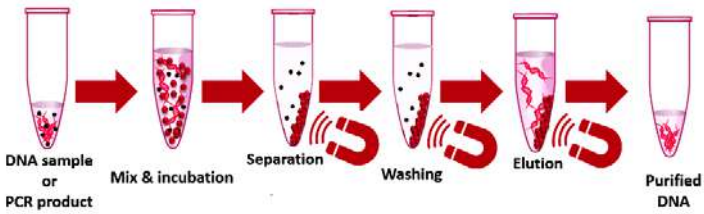
Data sheet

DNA Purification SPRI Magnetic Beads

Cat. No: AN360
Cat. No: AN361
Cat. No: AN362
Cat. No: AN363

Description

The **DNA Purification SPRI Magnetic Beads** utilizes solid-phase reversible immobilization (SPRI) paramagnetic bead technology for PCR amplicon purification. SPRI beads work by binding DNA reversibly to carboxyl-coated paramagnetic particles, allowing for high recovery of DNA using a quick and simple procedure. The Magnetic beads are pre-formulated with an optimized buffer to selectively bind DNA fragments of 100 bp and larger. Excess salts, enzymes, primers and nucleotides can be removed through a simple washing procedure.



DNA Purification SPRI Magnetic Beads	Size
Cat. No. AN360	5 ml
Cat. No. AN361	25 ml
Cat. No. AN362	60 ml
Cat. No. AN363	500 ml

Storage:

- Store protected from light at 4°C upon arrival, for up to 12 months.
- Freezing may reduce binding efficiency of beads.
- Beads appear brown and may settle during storage. Shake the reagent well to a homogenous appearance before use.

Features

- Does not require centrifugation/filtration steps
- Available in 96- or 384- well format
- Removes excess primers, primer-dimers, dNTPs and salts
- **DNA Purification SPRI Magnetic Beads** can be easily used in manual and automated 96- or 384-well formats.

Applications

PCR
Sequencing
Fragment Analysis
Genotyping
Cloning

(Continued on reverse side)

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canvax

Procedure:

This is a standard protocol for PCR purification using a bead:DNA ratio of 1.8X, but can be adapted for different bead:DNA ratios for size selection or different sample volumes.

1. Shake bottle with SPRI beads to fully resuspend and add accordingly to the sample reaction shown below (bead:DNA ratio of 1.8X)*.

96-well format	
Sample Reaction Volume(µl)	**SPRI beads Volume (µl)**
10	18
20	36
50	90
100	180

384-well format	
Sample Reaction Volume(µl)	**SPRI beads Volume (µl)**
5	9
7	12.6
10	18
14	25

* For microcentrifuge tube apply bead:DNA ratio of 1.8X.
(Volume of SPRI beads per reaction) = 1.8 x (Reaction Volume)

2. Pipette the entire volume 10 times to mix thoroughly to a homogenous appearance and incubate for 5 minutes at room temperature for optimal binding.

3. Place the reaction plate (or microfuge tube) onto a Magnetic Separation Rack for 5 minutes to separate the bead particles from the solution or until the solution becomes clear.

Wait for the solution to clear before proceeding to the next step.

4. Aspirate the cleared solution while the reaction plate is on the Magnetic Separation Rack. Avoid disturbing the beads.

5. Dispense 200 µL of freshly prepared 70% ethanol to each well of the reaction plate for the 96 well plate format; or 30 µL of freshly prepared 70% ethanol to each well of the reaction plate for the 384 well plate format. Incubate for 30 seconds at room temperature and fully remove the ethanol. Repeat for a total of 2 washes.

6. Place the reaction plate on bench top to air-dry. Be sure to allow the plate to dry completely.

Dry time is optional to ensure all trace of ethanol is removed. If the beads are not dried enough, residual ethanol may affect downstream reactions. Elution efficiency will significantly decrease if the beads are over dried.

7. Remove the reaction plate (or tube) from the Magnetic Separation Rack and add 15-50 µL of the elution buffer (water, TRIS or TE) to each well (or tube). Pipette mix 10 times to resuspend the beads and incubate at room temperature for 2-5 minutes.

8. Place the reaction plate (or tube) onto the Magnetic Separation Rack to separate the beads from the mix solution. Transfer the eluate to a new plate (or tube).

9. The purified DNA is ready for downstream applications or storage at -20°C.

PRODUCT USE LIMITATION

This product is developed, designed and sold exclusively for research purposes and in vitro use only. The product was not tested for use in diagnostics or for drug development. Please refer to **www.canvaxbiotech.com** for Material Safety Data Sheet of the product.