

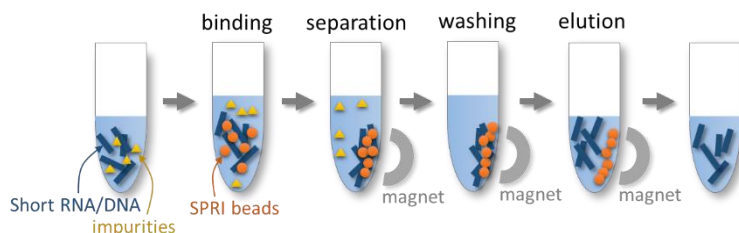
## Magnetic Beads (tRNA Purification)

Catalog No.	40054S	40054M	40054L
Volume	5 mL	20 mL	100 mL

### Description

Solid Phase Reversible Immobilization (SPRI) magnetic beads are often used for DNA and RNA purification because they are simple, fast, and effective. The beads are paramagnetic particles coated with carboxyl groups that reversibly bind to DNA and RNA. However, magnetic beads can only purify DNA/RNA fragments that are 100 base pairs or longer. DNA/RNA fragments shorter than 100 base pairs, including tRNA, are not effectively recovered.

We have developed **Magnetic Beads (tRNA Purification)** that solves the tRNA and short DNA/RNA recovery problem. The beads with our proprietary technology purify tRNA effectively by removing impurities and unwanted components such as dNTPs, detergents, salts, proteins, and other contaminants. The magnetic bead reagents can be used for oligo (>70 nt) applications.



Our Magnetic Beads are optimized to selectively purify tRNA and oligo fragments (>70 nt). Purified tRNA are ideal for applications requiring high quality, as the fragments are free of impurities and contaminants.

### Features

- Effective purification of tRNA and oligos (>70 nt)
  - tRNA
  - RNA fragments 70 nt or longer
  - DNA/RNA hybrid fragments 70 nt or longer
  - Oligo and chimeric oligo 70 nt or longer
  - dsDNA fragments 70 bp or longer
  - ssDNA fragments 70 nt or longer
- Removal of unwanted components and other impurities.

### Component

Catalog No.	40054S	40054M	40054L
Magnetic Beads	5 mL	20 mL	100 mL

### Storage Condition

- Store at 4°C, stable up to 12 months.

### Reagent & Equipment Needed (not provided in this reagent)

- Magnetic particle concentrator
- 96-well PCR plate or Eppendorf tubes
- 80% ethanol (prepare before use)

## Protocol

**Note:** Invert or shake the bottle to thoroughly resuspend the beads.

- 1) Transfer samples to a 96-well plate.
- 2) Transfer 2X volumes of the beads to the wells containing samples. **Slow pipetting of the viscous beads is needed for precise aliquot.** Mix by pipetting gently and thoroughly. Incubate for 5 min.
- 3) Load the sample plate on a magnet, incubate for 8 min, and discard the supernatant carefully.
- 4) Add 180  $\mu$ l of 80% ethanol without disturbing the beads. Incubate for 1 minute and discard the supernatant carefully. Remove all residual ethanol without disturbing the beads.
- 5) Air-dry the beads on the magnet for 5 min.
- 6) Remove the plate from the magnet and resuspend the beads in at least 20  $\mu$ l of water or Tris-HCl (10 mM). **Note:** Resuspend the beads in less than 20  $\mu$ l will reduce the yield.
- 7) Load the plate on the magnet, incubate for 1 min, and transfer supernatant (containing sample) to a new tube without disturbing the beads.

## Quality Control

Magnetic beads components passed stringent functional quality test.

## Product Use Limitation




This product is developed and sold for research purposes and *in vitro* use only. Please refer to BioDynami.com for Material Safety Data Sheet of the product.

## Limited Label License

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