

## Magnetic Microspheres

### Product Description

MS04T are monodisperse ferrimagnetic beads,  $\sim 1\mu\text{m}$  in diameter. The magnetic beads ensure rapid magnetic mobility and efficient isolation of high-purity mRNA from eukaryotic cells total RNA, cell and crude extracts of animal and plant tissues.

The mRNA can be directly used in most downstream applications of molecular biology, like RT-PCR, solid-phase cDNA library construction, S1 enzyme analysis, RNase protection assay, primer extension, dot-blot hybridization, in vitro translation, RACE, subtractive hybridization, Northern analysis, gene cloning and expression analysis.

Oligo (dT)<sub>30</sub> magnetic microspheres were designed based on the principle of base complementary pairing and poly (A) tail in mRNA. After annealing, place the reaction tube on a magnetic frame, then the mRNA binding to the magnetic microspheres was concentrated and collected, then discard the supernatant containing impurities. The protocol can be carried out in 15 minutes without preparation for total RNA. Oligo (dT)<sub>30</sub> on the surface of magnetic microspheres can be used to capture mRNA, and the first strand cDNA can be synthesized with oligo (dT)<sub>30</sub> as primer under the action of reverse transcriptase.

### Description of Materials

- ✧ Diameter:  $0.7\mu\text{m}$
- ✧ Concentration: 10mg/ml
- ✧ Surface group: Oligo(dT)<sub>30</sub>
- ✧ Density:  $1.4\text{ g/cm}^3$

- ✧ Storage Buffer: PBS pH 7.4, 0.1% Proclin 300.

### Binding ability

10 $\mu\text{g}$  mRNA can be isolated per 100  $\mu\text{L}$  (1 mg) magnetic microspheres, depending on the type of tissue or cell and the level of mRNA expression.

### Storage and Stability

Store at 2°C to 25°C for three years.

### Limited Product Warranty

Freezing, drying, centrifuging, etc. of the product may cause irreversible agglomeration of the microspheres, resulting in decreased bio-application performance.

For support visit <https://gentaur.com/> or email [info@gentaur.com](mailto:info@gentaur.com)

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