**Oligo(dT) Magnetic Particles**
**PRODUCT DATA SHEET**

# Oligo(dT) Magnetic Particles

**Description**

The Oligo(dT)$_{30}$ magnetic microspheres are designed based on the principle of complementary base pairing and the fact that mRNA contains a poly(A) tail. After annealing, the reaction tube was placed on a magnetic rack to concentrate and collect the mRNA bound with the magnetic microspheres, and the supernatant containing impurities was discarded. The protocol can be performed in 15 min without the need to prepare total RNA or perform other purification steps. Oligo(dT)$_{30}$ on the surface of magnetic microspheres can be used to capture mRNA, and the first cDNA can be synthesized by using Oligo(dT)$_{30}$ as primer under the action of reverse transcriptase. This product is applicable to rapid isolation of high purity complete mRNA from total RNA of eukaryotic cells or from crude extracts of cell, animal, and plant tissues. Isolated mRNAs can be directly used in most downstream applications of molecular biology, such as RT-PCR, solid-phase cDNA library construction, S1 nuclease analysis, ribonucleic acid protection analysis, primer extension, spot hybridization, in vitro translation experiments, RACE, cut-back hybridization, Northern analysis, gene cloning, and gene expression analysis.

Abvigen Inc. offers a wide range of magnetic particles, including Oligo(dT) Magnetic Particles. The product can be further flexibly adjusted according to customer requirements and use conditions to achieve customized supply.

For custom sizes, formulations or bulk quantities please contact our customer service department.

**Website: www.abvigen.com Phone: +1 929-202-3014 Email: info@abvigenus.com**

**Characteristics**

Concentration: 10 mg/ml

Average particle size: 0.7 μm

Surface: Oligo(dT)$_{30}$

Density: 1.4g /cm$^3$

Material: Iron oxide

Storage solution: PBS pH 7.4, 0.1% Proclin 300

Store: Storage at 2 - 25°C

Quality guarantee period: 36 months

**Binding ability**

Magnetic particles can separate up to 10 μg mRNA per 100 μL (1 mg), depending on the tissue or cell type and mRNA expression level.

**Advantages**

Superparamagnetic microspheres with excellent monodispersion performance

Low non-specific adsorption ensures higher mRNA purity

Uniform particle size, stable and controllable surface functional groups, and excellent experiment repeatability

Low sedimentation rate and high magnetic content ensure rapid magnetic separation

Large-scale production capacity and batch-to-batch consistency, which ensure the stability of test results

**Notes**

1 Do not freeze, above 25°C should add a small amount of ice to maintain a suitable temperature, do not directly contact the ice with the magnetic beads;

2 For small volume samples, it is very important to completely remove all buffers during the washing process;

3 Oligo$(dT)_{30}$-mRNA complex is recommended for immediate RT-PCR experiments;

4 For storage, eluate mRNA from magnetic microspheres and refrigerate;

5 The magnetic bead should be fully oscillated before being used, and the bubble should be avoided during removal;

6 RNA enzymes are very stable and generally do not require cofactors. Some RNase inhibitors may be added during the experimental procedure as appropriate, but this is not necessary. However, if it is necessary to preserve the eluted mRNA, it is recommended to add RNase inhibitors;

7 This product is only used for scientific research.

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**For 10 mg/ml of Oligo(dT) Magnetic Particles**

| Diameter | Conc. mg/ml | Particles/mg | Particles/ml |
|---|---|---|---|
| 0.7 | 10 | 1.07E+09 | 1.07E+10 |

**Ordering Information**

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