

PRODUCT INFORMATION

Oligo dT Magnetic Beads

v. 250801

Catalog number	C15056-5ML
Package	5 mL
Description	Croyez™ Oligo(dT) Magnetic Beads offer a highly efficient and reliable solution for the isolation and purification of poly(A)+ messenger RNA (mRNA) from a wide range of biological samples. Our beads are designed for seamless integration into various molecular biology workflows, providing a rapid, simple, and scalable method to obtain high-purity mRNA. Croyez™ Oligo(dT) Magnetic Beads are ideal for a broad spectrum of applications, including cDNA synthesis, RT-PCR, qRT-PCR and other gene expression analysis techniques. With their robust performance, exceptional purity, and ease of use, Croyez™ Oligo(dT) Magnetic Beads empower researchers to achieve superior results in their RNA-centric experiments.
Form	Liquid
Storage Buffer	Phosphate Buffered Saline containing 0.03% ProClin300, pH 7.4.
Stability & Storage	This product is stable after storage at: <ul style="list-style-type: none"> • 4°C for 12 months from date of receipt.
Materials Required but not Provided	<p>Devices & Consumables</p> <ul style="list-style-type: none"> • 10 µL to 1000 µL adjustable single-channel micropipettes with disposable tips • Disposable microcentrifuge tubes • Timer • Disposable gloves • Binding buffer: 20mM Tris (pH7.5), 1.25M LiCl, 2mM EDTA • Wash Buffer: 10mM Tris (pH7.5), 0.15M LiCl, 1mM EDTA • Elution Buffer: 10mM Tris (pH7.5), 1mM EDTA

Step-by-Step Guide to mRNA Capture Using Oligo(dT)25 Magnetic Beads

This protocol details the purification of messenger RNA (mRNA) from a 20 μL *in vitro transcription* (IVT) reaction using Oligo(dT)25 magnetic beads. This method efficiently separates and purifies poly(A)+ mRNA by leveraging the beads' magnetic properties, as outlined in the subsequent steps.

1. Preparing the Magnetic Beads

First, take the **Oligo(dT) Magnetic Beads** from the 2-8°C refrigerator. Invert the tube for 5-10 minutes to thoroughly resuspend the beads. Using a pipette, transfer 100 μL of bead suspension to a centrifuge tube. Place the tube on a magnetic separator until the solution becomes clear, then carefully aspirate and discard the supernatant.

2. Equilibrating the Magnetic Beads

Remove the centrifuge tube from the magnetic separator. Add 200 μL of Binding Buffer to the tube and mix well. Place the tube back on the magnetic separator until the solution is clear, then aspirate and discard the supernatant. Repeat this washing step two more times. Finally, remove the tube from the magnetic separator and resuspend the beads in 200 μL of Binding Buffer. (Adjust the resuspension volume of Binding Buffer based on your sample volume to keep the total reaction volume at 200 μL .)

3. Binding mRNA to Magnetic Beads

Add your sample to the prepared magnetic beads. Gently pipette up and down 5-10 times to mix thoroughly. Place the centrifuge tube in 25°C for 5 minutes.

4. Washing

Place the centrifuge tube on the magnetic separator until the solution becomes clear, then aspirate and discard the supernatant. Add 400 μL of Wash Buffer to the tube. Pipette up and down 5-10 times to mix. Place the tube on the magnetic separator, wait for the solution to clear, and then aspirate and discard the supernatant. Repeat this washing step one more time.

5. Eluting mRNA

You can adjust the elution volume to control the final mRNA concentration. We recommend adding 200-300 μL of Elution Buffer or nuclease-free water to the centrifuge tube. Gently pipette up and down 3-5 times to mix. Finally, place the centrifuge tube on the magnetic separator. Once the solution is clear, carefully aspirate and collect the supernatant. This supernatant now contains your purified mRNA.

Protocol for Regeneration of Oligo d(T) 25 beads

For Research Use Only.

Precautions & Warnings

In order to obtain reproducible test results, the following rules should be strictly obeyed:

- All reagents and specimens should be considered as potentially hazardous. We therefore recommend that this product is handled by those persons who have been properly trained.
- Wear suitable protective clothing and disposable gloves.
- Care should be taken to avoid reagents contacting with skin or eyes. If contacted, wash immediately and thoroughly with plenty of clean water.
- This product is intended for Research use only and is not for use in diagnostic and therapeutic procedures.
- This product is designed for a single, one-time use only.
- The assay should be performed as outlined in this manual, and in accordance with all instructions.
- Do not use expired or damaged products.
- Do not mix or substitute reagents with those from different lots or other sources.
- Thoroughly and gently mix all the reagents and specimens prior to use.
- Do not expose all the reagents to strong light during storage or incubation.
- Use disposable graduated pipettes and tips to avoid microbial contamination or cross-contamination of reagents or specimens which may invalidate the test.
- After use, all the reagents and specimens should be regarded as medical waste with risk of biological infection and properly disposed of in accordance with national regulations.