

User's Manual and Instructions

MagSeq mRNA Purification Kit

Catalog No.: K2012008

Introduction

MagSeq mRNA Purification Kit is specifically designed for mRNA isolation from Total RNA by magnetic beads.

Features

- Quick mRNA purification from Total RNA in less than an hour
- mRNA for next generation RNA sequencing or cDNA synthesis

Description

MagSeq mRNA Purification Kit contains reagents, including oligo (dT) magnetic beads, which is enough for 8 mRNA isolation. The kit's set up is perfectly compatible for next generation sequencing instrument, such as Illumina's HySeq, using Flow Cells with 8 channels.

Kit Contents

MagSeq mRNA Purification Kit	Part No.	Amount	Storage
MagSeq Oligo (dT) Solution	K2012008-1	900 μ l	4°C
Bead Washing Solution	K2012008-2	1 ml x 7	4°C
Resuspension Solution	K2012008-3	500 μ l	4°C
DEPC Water	K2012008-4	1 ml	4°C

Protocol

mRNA purification (vortex beads vigorously in each step to re-suspend beads and wash contaminants off)

1. Dilute 1~20 μ g total RNA with DEPC Water to 50 μ L in a 1.5 mL RNase free non-sticky tube
2. Heat at 70°C for 2 minutes to disrupt the secondary structures, and place on ice
3. Aliquot 50 μ L of MagSeq Oligo(dT) Solution
4. Shake at RT for 5 minutes
5. Place the tubes on the magnetic stand for at least two minutes and remove the supernatant
6. Wash the beads twice with 200 μ L of Bead Washing Solution. Vortex well to re-suspend beads. Place the tubes on the magnetic stand for at least two minutes and remove the supernatant
7. Add 50 μ L of Resuspension Solution to the beads, heat at 70°C for 2 minutes to elute mRNA from the beads
8. Meanwhile, aliquot 50 μ L MagSeq Oligo(dT) Solution to a new tube
9. After heating the bead and mRNA at 70°C for 2 minutes, immediately put it on the magnet stand for at least two minutes and then transfer the supernatant (mRNA) to the tube from step 8; shake RT for 5 minutes
10. Place the tubes on the magnetic stand for at least two minutes and remove the supernatant
11. Wash the beads twice with 200 μ L of Bead Washing Solution. Vortex well to re-suspend beads. Place the tubes on the magnetic stand for at least two minutes and remove the supernatant.
12. Add 20 μ L of DEPC Water to the beads, then heat at 70°C for 2 minutes to elute mRNA from the beads. Immediately put on the magnet stand for two minutes and transfer the supernatant (mRNA) to a fresh 200 μ L thin wall PCR tube, and there should be ~19 μ L of mRNA solution.
13. Determine mRNA isolation by UV, and use appropriate amount for sequencing or cDNA synthesis.