LEXOGEN

Enabling complete transcriptome sequencing

Poly(A) RNA Selection Kit

- Highly specific poly(A) enrichment
- Magnetic bead-based purification
- Various downstream applications such as RNA-Seq

Introduction

Lexogen's Poly(A) RNA Selection Kit is suited for isolation of polyadenylated RNA from total RNA samples. The protocol is highly specific and allows very efficient elimination of rRNA which do not have poly(A) tail (Figure 2) and was extensively tested with 500 ng - 100 µg of total RNA input. It enables poly(A) isolation from 500 µg total RNA (100 x 5 µg) up to 1000 µg total RNA (10 x 100 µg).

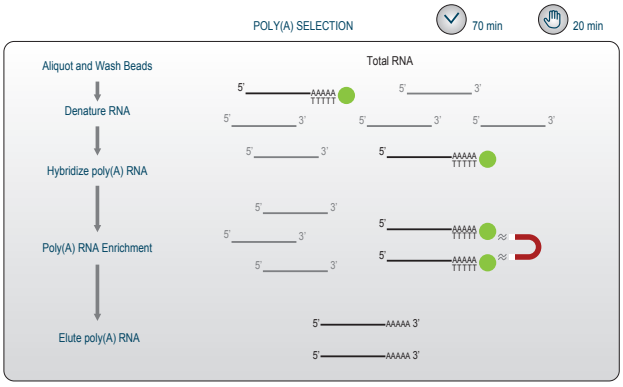

Figure 1 | Schematic overview of the Poly(A) RNA Selection.

Workflow

The poly(A) RNA Selection protocol is very straight forward and takes just 20 minutes of hands-on time (Figure 1). Total RNA is briefly denatured and the polyadenylated 3' ends present in most mRNAs are hybridized to oligodT beads. Any RNA without poly(A) stretches, such as 28S and 18S ribosomal RNAs and tRNAs, will not be captured by the oligodT beads and hence be removed during subsequent washing steps.

Polyadenylated RNA can either be eluted from the oligodT beads or directly inserted into downstream applications while still being bound to the oligodT beads. In fact, the oligodT attached to the beads can be directly used to prime first strand cDNA synthesis. Isolated poly(A) RNA is ready for cDNA library construction for analysis with microarrays, RT PCRs, as well as total RNA-Seq (e.g., SENSE Total RNA-Seq Library Prep (Cat. No. 009)).

This Poly(A) RNA Selection Kit is an integral part of Lexogen's SENSE mRNA-Seq Library Prep Kits (Cat. No. 001, 004, 006).

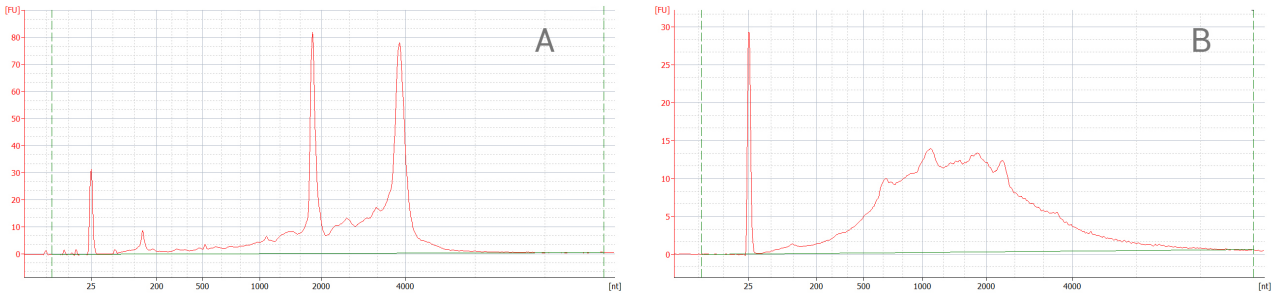

Figure 2 | Bioanalyzer traces of the poly(A) RNA enrichment using 5 µg of Universal Human Reference RNA (UHRR) (A) input with the Poly(A) RNA Selection Kit. Recovery of poly(A) selected UHRR (B) is about 2 % of the initial input amount.

Ordering Information

Catalog Numbers:
039.100 (Poly(A) RNA Selection Kit)

Find more about Poly(A) RNA Selection at www.lexogen.com
Contact us at info@lexogen.com or +43 1 345 1212-41