A&A BIOTECHNOLOGY
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Manual

Poly(A)

catalog #	size
4001-1	1 mg
4001-100	100 mg

For research use only.

Guarantee

A&A Biotechnology provides guarantee on this product.
The company does not guarantee correct performance of this kit in the event of:

- not adhering to the supplied protocol
- use of not recommended equipment or materials
- use of other reagents than recommended or which are not a component of the product
- use of expired or improperly stored product or its components

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Description

Poly(A) - polyadenylic acid, is a single-stranded RNA homopolymer with an average chain length of >200 nucleotides. It protects RNA from RNAses. Tested for the presence of ribonucleases.

Polyadenylation is a modification of eukaryotic mRNA that involves the addition of a series of adenine nucleotides, called a polyadenylate fragment or poly(A), to the 3' end. After transcript synthesis is complete, the mRNA is cleaved by a specific endonuclease at a certain distance from the AAUAAA polyadenylation signal, and then poly(A) polymerase (PAP) adds 50 to 250 adenine nucleotides (to the 3' end). This protects the eukaryotic mRNA molecule from degradation before it can leave the cell nucleus. Furthermore, the transcript with a poly(A) tail is a more efficient template during translation.

Store at -20 °C.

Preparation of 1 mg/ml Poly(A) solution

1. Add 1 ml of ultrapure water (not included, # 005-5, 005-515) to 1 mg of Poly(A) lyophilisate.
2. Vortex for 10 s.
3. Store solution at -20 °C.

Application

If the expected amount of nucleic acids in the sample is low or you want to increase the efficiency of DNA/RNA isolation, add 1-2 µl of the prepared Poly(A) solution (1 mg/ml) to the sample just before starting the isolation.

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