Poly A Carrier RNA

Cat.No.: HYC119

Product Description

Poly A is a mixture of 100 ~ 10000 polyadenylic acids formed by the polymerization of adenylic acid in vitro by polynucleotide phosphorylase. In vivo, poly (A) is added to the 3' end of mRNA by enzymes to improve the stability of mRNA. In nucleic acid extraction applications, adding poly A to the lysis solution or binding solution can increase the yield of DNA and RNA. There are several aspects to the mechanism by which Poly A increases nucleic acid yield. 1) Surface adsorption of saturated contact objects. Most polypropylene objects have static electricity on their surfaces, which will adsorb nucleic acids. Carrier RNA can saturate these adsorption effects and reduce the loss of target nucleic acids; 2) There are various nucleases in biological samples and the environment. Poly A can passivate trace nucleases in the extraction or storage steps, thereby increasing the yield and stability of target nucleic acids; 3) In the nucleic acid purification steps of alcohol-mediated precipitation or binding, Poly A can co-precipitate or form polymer particles with the target nucleic acid to increase the recovery rate.

Components

Components	Size-1	Size-2	Size-3
Poly A Carrier RNA	310 μg	100 mg	2 g

Storage

Store in a dry place at -20 ~ 8 ℃, long-term storage should be placed at -20 ℃.

Properties

CAS Number	26763-19-9
Appearance	White lyophilized powder
Purity	99%
Molecular Weight	700 - 3500 kDa

Instruction

Take an appropriate amount of lyophilized powder, add DEPC-treated water or guanidine salt-containing solution to dissolve it into 0.5 - 1 μg/μL, and then aliquot and store at -20 °C.

Notes

1. Virus DNA/RNA extraction: adding 1 - 5 μg Carrier RNA to the lysate can improve the yield of RNA / DNA, stabilize the target nucleic acid and avoid the degradation of the purified nucleic acid during storage.
2. In the micro DNA/RNA extraction by column membrane method (< 1μg), adding carrier RNA to 1-5ug is conducive to improve the yield of nucleic acid.
3. In the alcohol mediated nucleic acid precipitation and concentration step, the addition of 1-2 μg carrier RNA is helpful to improve the recovery of short segment RNA.
4. In the quantitative probe PCR reaction solution, adding 10 - 100 ng carrier RNA to the reaction solution is helpful to improve the sensitivity and reduce the CT value.
5. For research use only!