Product Details

E. coli Poly(A) Polymerase is derived from E. coli and expressed in E. coli, it catalyzes the template independent addition of AMP from ATP to the 3′ end of RNA.

Application

- 3' labeling of RNA with ATP
- Poly(A) tailing of RNA for cloning or affinity purification
- Enhances translation of RNA transferred into eukaryotic cells

Unit Definition

One unit is defined as the amount of enzyme that will incorporate 1 nmol of AMP into RNA in 10 minutes at 37°C.

Quility Control

No Host Cell Protein RNases and DNases residues.

Purity

>90% as determined by SDS-PAGE.

Formulation

Supplied as 0.2 μm filtered solution in 20 mM Tris, 300 mM NaCl, 0.1% TritonX-100, 1 mM EDTA, 0.5M Arginine, pH7.5 with glycerol as protectant.

Contact us for customized product form or formulation.

Shipping

This product is supplied and shipped with dry ice, please inquire the shipping cost.

Storage

This product is stable after storage at:
- The product MUST be stored at -20°C or lower upon receipt.
- -20°C for 6 months under sterile conditions.

Notes

The tailing effect of Poly(A) Polymerase is affected by factors such as enzyme amount, ATP and reaction time, and the length of the Poly(A) can be controlled by adjusting the reaction time according to different experimental needs;

Poly(A) polymerase is not bioactive until divalent cations such as Mg^{2+} are present;

EDTA could inhibit the enzyme activity. To stop the reaction, add EDTA to a final concentration of 10 mM;

E. coli poly(A) polymerase will not add Poly(A) tail to single-stranded DNA;

Poly(A) Polymerase does not add Poly(A) tail of the same length to all RNA molecules.

SDS-PAGE
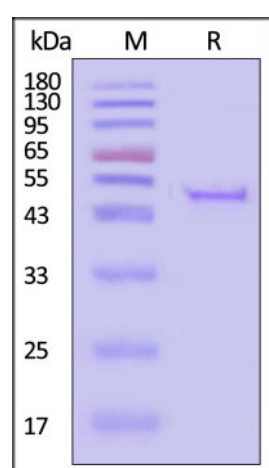
E. coli Poly(A) Polymerase (5U/ul) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.