DATA SHEET

Jena Bioscience

Yeast Poly(A) Polymerase

recombinant, *E. coli* overexpressing *Saccharomyces cerevisiae* Poly(A) Polymerase

Cat. No.	Amount
RNT-006-S	30.000 units
RNT-006-L	3 x 30000 units

Unit Definition: One unit is defined as the amount of the enzyme required to catalyze the incorporation of 1 pmol of AMP into an acid-insoluble form in 1 minutes at 37 °C.

For general laboratory use.

Shipping: shipped on gel packs

Storage Conditions: store at -20 °C

Additional Storage Conditions: avoid freeze/thaw cycles

Shelf Life: 12 months

Purity: ≥ 95 % (SDS-PAGE)

Form: liquid

Concentration: 600 units/µl

Description:
Yeast Poly(A) Polymerase catalyzes the transfer of AMP to 3'-hydroxyl ends of RNA molecules. The reaction is template-independent, requires ATP as substrate and Mg^{2+} or Mn^{2+} as cofactor. It works more efficiently than *E. coli* Poly(A) polymerase in some poly(A) tailing and RNA labeling reactions (e.g. shorter incubation time, broader acceptance of RNA template size).

Polyadenylation increases (m)RNA stability and therefore translation efficiency in transfection and microinjection experiments in eukaryotic cells.

For information on (m)RNA polyadenylation using *in vitro* transcription reaction mixes as template, refer to the Poly(A) Tailing Enzyme Testkit (#RNT-004).

Content:
***Yeast* Poly(A) Polymerase**
#RNT-006-S: 1x 50 µl (600 units/µl)
#RNT-006-L: 3x 50 µl (600 units/µl)
20 mM Tris-HCl (pH 8.0), 50 mM KCl, 0.5 mM DTT, 50% Glycerol (v/v)

***Yeast* Poly(A) Polymerase Reaction Buffer**
1x 1.2 ml (5x)
100 mM Tris-HCl (pH 7.0), 3 mM $MnCl_2$, 0.1 mM EDTA, 1 mM DTT, 0.5 mg/ml acetylated BSA, 50% glycerol (v/v)

ATP - Solution
1x 100 µl (100 mM)

Related Products:
PCR-grade water, #PCR-258