

Ver. EN20230531

RNase R (20 U/ μ L)

Product description

Ribonuclease R (RNase R) from E. coli, is a magnesium-dependent $3' \rightarrow 5'$ exoribonuclease that can digest all linear RNAs but does not digest lariat or circular RNA structures. Most cellular RNAs will be digested completely by RNase R, with the exception of tRNAs, 5S RNA and intron lariats. RNase R is used for enrichment of circRNAs in biological samples, identification of intronic lariat sequences, identification of exonic circRNAs, studying alternative splicing.

Specifications

Cat. No.	14606ES72 / 14606ES86 / 14606ES92
Size	250 U / 2, 500 U / 10, 000 U

Components

Components No.	Name	14606ES72	14606ES86	14606ES92
14606-A	RNase R (20 U/μL)	12.5 μL	125 μL	500 μL
14606-B	10×RNase R Reaction Buffer	250 μL	3 × 1 mL	10 mL

Storage

This product should be stored at $-25^{\circ}-15^{\circ}C$ for 2 years.

Instructions

Prepare the following reaction system in a sterile microcentrifuge tube

component	Volume
10×RNase R Reaction Buffer	2 μL
RNA sample	1 μg
RNase R (20 U/ μ L)	2-4 U
RNase-free ddH ₂ O	Up to 20 μL

Incubate at 37 °C for 10 - 30 minutes.

Notes

- 1. The activity of RNase R requires $0.1-1.0 \text{ mM Mg}^{2+}$;
- 2. With the increase of RNA, the reaction time can be extended and the enzyme amount can be increased appropriately;
- 3. The EDTA content in RNA samples may affect the activity of RNase R.
- 4. Incubate at 70 $^{\circ}\text{C}$ for 10 minutes can inactivate the enzyme.