

RNase H

Cat. no. TTG-RH1250

Product Size: 1250 U

Concentration: 5000 U/mL

Storage: At -20°C for 1 year

Description

RNase H is an endoribonuclease that degrades the RNA strand of RNA–DNA hybrid molecules. This enzyme is inactive against single- or double-stranded DNA molecules, and its purity is above 95%, as determined through SDS-PAGE. This product does not contain endonucleases, ss-DNase, or other RNase contaminations. Moreover, no residual host genomic DNA has been detected in this endoribonuclease through PCR.

Source of Protein

The protein source is a recombinant *E. coli* strain carrying the RNase H (*rnh*) gene from *E. coli*.

Storage Conditions

RNase H should be stored under the following conditions: 10 mM Tris-HCl, 50 mM KCl, 0.1 mM EDTA, 1 mM DTT, 200 µg/mL BSA, 50% glycerol (pH, 7.4; temperature, 25°C).

Unit Definition

One unit is defined as the amount of enzyme required to produce 1 nmol RNA from a 20 pmol fluorescently labeled 50-base-pair RNA-DNA hybrid (50 µL) in 20 minutes at 37°C.

Reaction Conditions

For a 1X RNase H reaction buffer, incubate at 37°C.

The 1X RNase H reaction buffer is composed of the following: 50 mM Tris-HCl, 75 mM KCl, 3 mM MgCl₂, and 10 mM dithiothreitol (pH, 8.3; temperature, 25°C). Heat inactivation is achieved through incubation at 65°C for 20 min.

The product is for research purposes only; it is not for diagnostic and clinical use.