

Product components

Components	Component Number	250 U	1250 U
RNase H (5,000 U/mL)	RM21305	50 μ L	250 μ L
10X RNase H Reaction Buffer	RM20142	1.25 mL	1.25 mL

Product Description

RNase H (Ribonuclease H) is an endoribonuclease that specifically hydrolyzes the phosphodiester bonds of RNA which is hybridized to DNA. This enzyme does not digest single or double-stranded DNA.

Product Source

An *E.coli* strain that carries the cloned RNase H gene (*rnh*) from *Escherichia coli*.

Storage Temperature

-20°C

Unit Definition

One unit is defined as the amount of enzyme required to produce 1 nmol of ribonucleotides from 20 picomoles of a fluorescently labelled 50 base pair RNA-DNA hybrid in a total reaction volume of 50 μ L in 20 minutes at 37°C.

Reaction Conditions

1X RNase H Reaction Buffer, Incubate at 37°C

1X RNase H Reaction Buffer

50 mM Tris-HCl, 75 mM KCl, 3 mM MgCl₂, 10 mM dithiothreitol, pH 8.3 @ 25°C

Storage Conditions

10 mM Tris-HCl, 50 mM KCl, 0.1 mM EDTA, 1 mM DTT, 200 μ g/mL Recombinant Albumin, 50% Glycerol, pH7.4 @ 25°C

Heat Inactivation

65°C for 20 min

Notes

When 10X RNase H Reaction Buffer (RM20142) thaws from low to room temperature, white precipitates may appear in the solution, which is normal, please dissolve in a water bath at 37°C and mix well before use.

QC Process

- ◆ Purity is above 95% detected by SDS-PAGE.
- ◆ No endonucleases, ss-DNase and other RNases contamination.
- ◆ No residual host genomic DNA detected by PCR.