

## Product components

Components	Component Number	250 U	1250 U
RNase H (5,000 U/mL)	RM21305	50 µL	250 µL
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 µL 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 MgCl<sub>2</sub>, 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 µg/mL Recombinant Albumin, 50% Glycerol, pH7.4 @ 25°C

## Heat Inactivation

65°C for 20 min

## 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.