

Product datasheet

Recombinant E. coli RNase H protein ab91360

[1 Image](#)

Description

Product name	Recombinant E. coli RNase H protein
Biological activity	Specific Activity: 100,000 units/mg protein. Unit Definition: 1 unit is defined as the amount of the enzyme that hydrolyzes 1 nmol of the RNA in ³ H labeled M13 DNA/RNA hybrid to acid-soluble ribonucleotides in 20 min at 37°C. Endo- and exo-DNase activities and RNase activity were not detected with 100 U/ml RNaseH in 50 ul reaction at 37°C.
Purity	> 95 % SDS-PAGE. Greater than 95% protein determined by SDS-PAGE (CBB staining) Endo- and exo-DNase activities and RNase activity were not detected with 100 U/ml RNaseH in 50 ul reaction at 37 degrees C.
Expression system	Escherichia coli
Accession	<u>P0A7Y4</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Escherichia coli

Specifications

Our **Abpromise guarantee** covers the use of **ab91360** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE Functional Studies
Form	Liquid
Additional notes	To avoid contamination of trace amounts of nucleic acids in BSA, use reaction buffer that does not contain BSA and use RNaseH at higher concentrations. 1 unit is defined as the amount of the enzyme that hydrolyzes 1 nmol of the RNA in ³ H-labeled M13 DNA/RNA hybrid to acid-soluble ribonucleotides in 20 min at 37°C.

Preparation and Storage

Stability and Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
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pH: 7.5

Constituents: 0.75% Potassium chloride, 0.0154% DTT, 0.316% Tris HCl, 50% Glycerol (glycerin, glycerine)

50 units/ul

This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

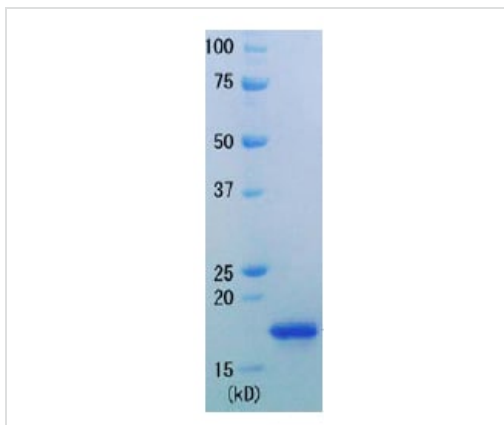
Relevance

RNase H from *E. coli* is an endoribonuclease that specifically hydrolyzes the phosphodiester bonds of RNA in RNA:DNA duplexes to generate products with 3'-hydroxyl and 5'-phosphate ends.^{1,2,3} RNase H degrades only the RNA component of the DNA-RNA hybrid (RNA that is hydrogen bonded to a complementary DNA strand). Other enzymes in *E. coli* which degrade RNA in the DNA-RNA hybrid are DNA polymerase I and exonuclease III, but these degrade either the RNA or DNA of the hybrids. Ribonuclease H will not cleave single-stranded or double-stranded DNA or RNA.^{1,2}

Cellular localization

Cytoplasmic

Images



SDS-PAGE - Recombinant *E. coli* RNase H protein
(ab91360)

SDS-PAGE of *E. coli* RNase H.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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