

RNase III, *E. coli*

CATALOG NO.: M1226-100
AMOUNT: 100 U (100 µl)
CONCENTRATION: 1 U/µl
PRODUCT SOURCE: Recombinant *E. coli*
FORM: Liquid

KIT COMPONENTS:

Components	Volume	Part No.
RNase III, <i>E. coli</i> (1 U/µl)	100 µl (100 U)	M1226-100-1
10X RNase III, <i>E. coli</i> Reaction Buffer	300 µl	M1226-100-2

DESCRIPTION: RNase III, *E. coli* is an endoribonuclease that specifically digests dsRNA into dsRNA fragments of 12-15 base pairs that have two or three nucleotide 3'-overhangs with 5' phosphate and 3' hydroxyl termini.

APPLICATIONS:

1. dsRNA digestion to short dsRNA fragments
2. Useful for RNA processing, maturation and structure studies
3. Directed cleavage of RNA
4. siRNA preparation for RNA interference in mammalian cells

Note: This product is not suitable for NGS or second strand cDNA synthesis applications.

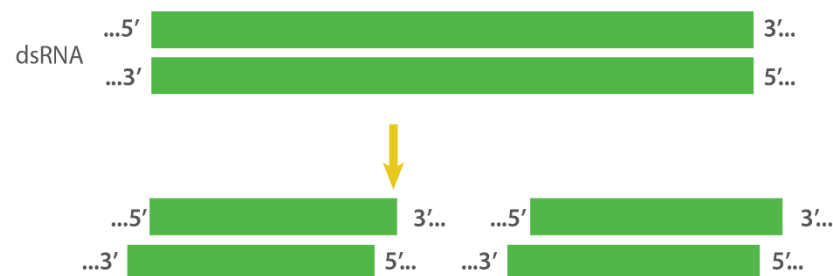
UNIT DEFINITION: One unit is defined as the amount of RNase III, *E. coli* that is required to hydrolyze 1 nmol of poly(A):poly(U) dsRNA in 30 minutes at 37°C in 1X RNase III, *E. coli* Reaction Buffer.

STORAGE BUFFER: 50 mM Tris-HCl (pH 7.5), 0.5M NaCl, 1 mM DTT, 0.1 mM EDTA, 0.1% Triton® X-100 and 50% (v/v) Glycerol

STORAGE CONDITIONS: Store at -20°C. Avoid repeated freeze-thaw cycles of all components to retain maximum performance. All components are stable for one year from the date of shipping when stored and handled properly.

10X RNase III, *E. Coli* REACTION BUFFER COMPONENTS: 100 mM Tris-HCl, 600 mM NaCl, 100 mM MgCl₂, 10 mM DTT, pH 8.3

REACTION CONDITIONS: Use 1X RNase III, *E. coli* Reaction Buffer and incubate at 37°C



RELATED PRODUCTS:

- RNase A (Cat# M1227-25)
- RNase R (Cat# M1228-500)
- RNaseOFF ribonuclease Inhibitor (Cat# M1238-4000)
- DNase, *E. coli* DNA Ligase (Cat# M1217-100)
- Link-FAST™ 5 Minutes DNA Ligation Kit (Cat# K902-50)
- New T4 DNA Ligase (Cat# M1247-200)
- T4 DNA Ligase (5 u/µl) (Cat# 9101-250)
- T4 RNA Ligase 1 (ssRNA Ligase) (Cat# M1218-100)
- T4 RNA Ligase 2 (dsRNA Ligase) (Cat# M1219-100)
- T4 RNA Ligase 2 (Truncated) (Cat# M1220-100)

FOR RESEARCH USE ONLY! Not to be used on humans.