

RNase Inhibitor

- W2511 2,000 U
- W2511-5 10,000 U
- W2511-25 50,000 U

Description

RNase Inhibitor is an acidic, 52 kDa protein that is a potent non-competitive inhibitor of pancreatic-type ribonucleases such as RNase A, RNase B, and RNase C. The enzyme is provided as a fusion of the porcine RNase Inhibitor gene with a proprietary, 22.5 kDa protein tag.

Kit Contents

Contents	W2511	W2511-5	W2511-25
RNase Inhibitor (40 U/μl)	50 μl	250 μl	1,250 μl

Storage Buffer

20 mM Hepes-KOH, 50 mM KCl, 8 mM dithiothreitol, 50% glycerol, pH 7.5 (25°C)

Unit Definition

One unit is defined as the amount of enzyme required to inhibit by 50% the hydrolysis of cytidine 2',3'-cyclic monophosphate by 5 ng of RNase A.

Storage Conditions

Store all components at -20°C in a non-frost-free freezer.

Product Specification

Unit Concentration	40,000 U/ml
Protein Concentration	0.1 mg/ml
Purity (SDS-PAGE)	>99%
SS Exonuclease	2,000 U <5.0% released
DS Exonuclease	2,000 U <0.5% released
Endonuclease	2,000 U <10% converted
E.coli 16S rDNA Contamination	2,000 U <10 copies

Quality Control Analysis:

Unit Characterization Assay

Specific activity was measured using a 2-fold serial dilution method. Dilutions of enzyme were made in 1X reaction buffer. Reactions were incubated 10 minutes at 75°C, plunged on ice, and analyzed using the method of Sambrook and Russell.

SDS-Page (Physical Purity Assessment)

2.0 μl of concentrated enzyme solution was loaded on a denaturing 4-20% Tris-Glycine SDS-PAGE gel flanked by a broad-range MW marker and 2.0 μl of a 1:100 dilution of the sample. Following electrophoresis, the gel was stained and the samples compared to determine physical purity. The acceptance criteria for this test requires that the aggregate mass of contaminant bands in the concentrated sample do not exceed the mass of the protein of interest band in the dilute sample, confirming greater than 99% purity of the concentrated sample.

Quality Authorized by : Jamie Ahn 