

Active Recombinant Yeast XRN1 Protein

Cat. No. XRN1-01Y **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Purified from E. coli carrying a plasmid overexpressing the yeast XRN-1 gene
Species	Yeast
Source	E.coli
Description	XRN-1 is highly processive 5'→3' exoribonuclease, requiring 5' monophosphate. It also acts on 5' monophosphate ssDNA with greatly reduced efficiency.
Reaction Condition	1× Buffer 3, Incubate at 37 centigrade. 1× Buffer 3: 100 mM NaCl, 50 mM Tris-HCl, 10 mM MgCl ₂ , 1 mM DTT, (pH 7.9 at 25 centigrade)
Unit Definition	One unit is defined as the amount of enzyme required to digest 1 µg of phosphorylated yeast RNA in one hour at 37 centigrade.
Application	Tested for the absence of DNases and RNases
Note	It is recommended to add mouse RNase inhibitor to a final concentration of 1 unit/µL in the reaction to prevent nonspecific RNA degradation.
Storage Buffer	Supplied with 10X Reaction Buffer (20 mM Tris-HCl, 500 mM NaCl, 2 mM DTT, 0.1 mM EDTA, 50% Glycerol, 0.1% (w/v) Triton X-100)
Reference	1. Stevens, A (1980). Biol. Chem. 255, 3080-3085.

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GENE INFORMATION

Gene Name	XRN1 chromatin-binding exonuclease XRN1 [<i>Saccharomyces cerevisiae</i> S288C]
Official Symbol	XRN1
Synonyms	XRN1; chromatin-binding exonuclease XRN1; DST2; KEM1; RAR5; SEP1; SKI1; chromatin-binding exonuclease XRN1; Evolutionarily-conserved 5'-3' exonuclease; deNADing enzyme that modulates mitochondrial NAD-capped RNA; component of cytoplasmic P-bodies involved in mRNA decay; positively regulates transcription initiation and elongation; involved in microtubule-mediated processes, filamentous growth, rRNA maturation, telomere maintenance, tRNA intron turnover; negative regulator of autophagy; activated by glycolytic flux and scavenger decapping enzyme Dcs1p; role in preventing L-A mycovirus pathogenesis
Gene ID	852702
mRNA Refseq	NM_001181038
Protein Refseq	NP_011342
UniProt ID	P22147

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