

Datasheet for 200-401-MU6**Nuclease/NucA Antibody****Overview**

Description:	Anti-Nuclease/NucA (RABBIT) Antibody - 200-401-MU6
Item No.:	200-401-MU6
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Bacteria
Host Species:	Rabbit

Product Details

Background:	Nucleases are secreted by <i>Serratia marcescens</i> into the medium it surrounds. The enzyme is a sugar-nonspecific hydrolase, capable of cleaving both RNA and DNA in either double or single stranded form. It requires divalent cations, preferably Mg ²⁺ , and is functional across a broad pH range from 6 to 10 (optimal at 8-8.5) and wide temperature ranges between 35°C and 44°C. The ability of <i>Serratia</i> to secrete nuclease appears to be regulated. Bacterial cultures at differing cell densities display different kinetics and efficiencies of nuclease secretion [i.e. growth medium, growth conditions, and host cell mutations]. Anti-Nuclease/NucA Antibody is useful for researcher interested in identifying nucleic acid contamination.
Synonyms:	Benzonase, Nuclease, Endonuclease, <i>Serratia marcescens</i> endonuclease, NucA
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	nucA
Reactivity:	Bacteria
Immunogen Type:	Recombinant Protein
Immunogen:	Anti-Nuclease/NucA was prepared by repeated immunizations with recombinant benzonase protein produced in <i>E. coli</i> .

Purity/Specificity:	This antibody was purified from monospecific antiserum by Protein A chromatography. This antibody will react with endonuclease from <i>S. marcescens</i> . Cross reactivity from other sources is unknown.
Relevant Links:	• UniProtKB - P13717

Application Details

Tested Applications:	ELISA, WB
Application Note:	Anti-Nuclease/NucA has been tested by ELISA and western blot. Expect a band ~ 28 kDa in size corresponding to endonuclease by western blotting in the appropriate cell lysate or extract. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:21,600-1:22,600
WB:	1:1000

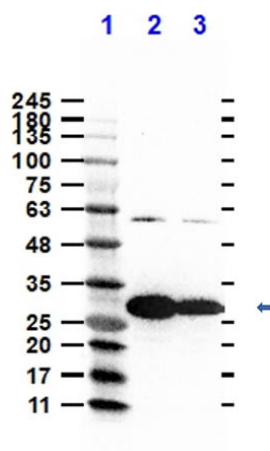
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.06 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western Blot of Rabbit Anti-Nuclease/NucA Antibody.

Lane 1: Opal Prestained Molecular Weight Marker (p/n MB-210-0500).

Lane 2: Nuclease Protein Reduced [0.02 μg].

Lane 3: Nuclease Protein Reduced [0.01 μg].

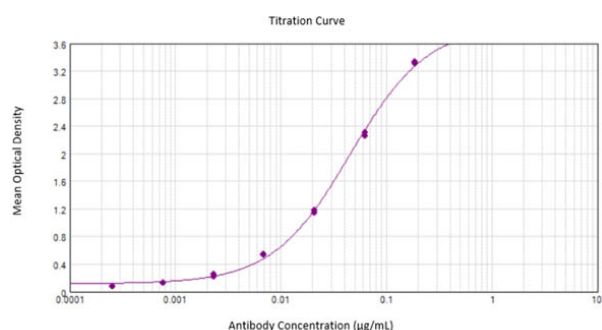
Primary Antibody: Anti-Nuclease/NucA at 1:1000 overnight at 2-8°C.

Secondary Antibody: Goat Anti-Rabbit IgG Peroxidase (p/n 611-1302) at 1:70,000 for 30mins at RT.

Blocking Buffer: 5% Blotto Blocking Buffer (p/n B501-0500) in 1XPBS for 1 hour at RT.

Expect: ~28kDa. Observed: ~28kDa for Nuclease, ~60kDa dimer.

Exposure: 9.9sec.



ELISA

ELISA Results of Rabbit Anti-Nuclease/NucA Antibody. Each well was coated in duplicate with 10 μg/mL of benzonase protein. The working dilution for Anti-Nuclease/NucA is 1:22,100. The starting dilution of antibody was 5 μg/mL and the X-axis represents the Log₁₀ of a 3-fold dilution. This titration is a 4-parameter curve fit where the IC₅₀ is defined as the titer of the antibody. Assay performed using Goat Anti-Rabbit IgG HRP conjugated (p/n 611-1302) at 1:10,000 and TMB substrate (p/n TMBE-1000).

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.