

Datasheet for 200-301-A97**Lysine Acetylated Antibody****Overview**

Description:	Anti-Lysine Acetylated (AcK) (MOUSE) Monoclonal Antibody - 200-301-A97
Item No.:	200-301-A97
Size:	100 µg
Applications:	IHC, WB
Reactivity:	Avian, Mammalian
Host Species:	Mouse

Product Details

Background:	Post-translational modifications of proteins play critical roles in the regulation and function of many known biological processes. A common posttranscriptional modification of lysine residues involves acetylation (1). The conserved amino-terminal domains of the four core histones (H2A, H2B, H3 and H4) contain lysines that are acetylated by histone acetyltransferases (HATs) and deacetylated by histone deacetylases (HDACs) (2). Protein posttranslational reversible lysine Nε-acetylation and deacetylation have been recognized as an emerging intracellular signaling mechanism that plays critical roles in regulating gene transcription, cell-cycle progression, apoptosis, DNA repair, and cytoskeletal organization (3). The regulation of protein acetylation status is impaired in the pathologies of cancer and polyglutamine diseases (4). HDACs therefore are promising targets for anticancer drugs currently in development (5).
Synonyms:	acetyl Lysine antibody, Acetylated lysine antibody, Lysine antibody
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	7F8
Format:	IgG1

Target Details

Reactivity:	Avian, Mammalian
Immunogen Type:	Native Protein

Immunogen:	This Protein G purified monoclonal antibody was prepared using conventional hybridoma technology after repeated immunizations with acetylated keyhole limpet hemocyanin (KLH).
Purity/Specificity:	This Protein G purified monoclonal antibody reacts with proteins containing acetylated lysine residues and does not detect non-acetylated lysine residues. This antibody is known to react with acetylated lysine residues from mammalian and avian sources. Reactivity with acetylated lysines from other sources is also expected.

Application Details

Tested Applications:	IHC, WB
Application Note:	This Protein G purified antibody has been tested for use in ELISA, immunohistochemistry-P, and western blotting. Specific conditions for reactivity should be optimized by the end user. Approximately 1 µg of antibody is sufficient to detect 20 µg of acetylated chicken erythrocyte histones (sodium butyrate treated) by Western blotting using HRP Gt-a-Mouse IgG (p/n 610-103-121) and chemiluminescent substrate (p/n PICOMAX-110).
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	User Optimized
IHC:	1:200 - 1:1,000
WB:	1:500 - 1:2,000

Formulation

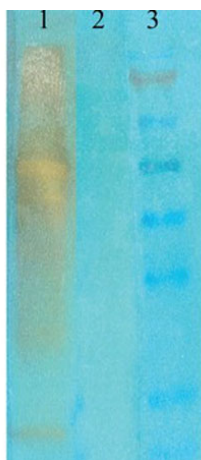
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	1X PBS, pH 7.4
Preservative:	0.09% (w/v) Sodium Azide
Stabilizer:	50% (v/v) Glycerol

Shipping & Handling

Shipping Condition:	Wet 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

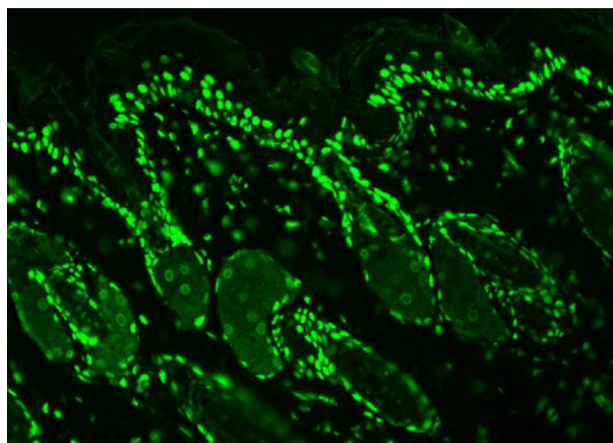


Western Blot

Western Blot analysis of Mouse Anti-Acetylated Lysine Monoclonal Antibody.

Load: Lane 1: 75ng acetylated BSA, Lane 2: 75ng non-acetylated BSA, and Lane 3: molecular weight marker.

Primary Antibody: Mouse Anti-Acetylated Lysine Monoclonal Antibody at 1:1000.



Immunofluorescence Microscopy

Immunohistochemistry of Mouse Anti-Acetylated Lysine Monoclonal Antibody.

Tissue: Mouse backskin from transgenic mice.

Fixation: Bouin's Fixative and paraffin-embedded.

Primary Antibody: Mouse Anti-Acetylated Lysine Monoclonal Antibody at 1:100 for 1 hour at RT.

Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT.

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.