

Datasheet for 600-401-J98**Histone H3 K4me3/K9ac Antibody****Overview**

Description:	Anti-Histone H3 [Trimethyl Lys4/ac Lys9] (RABBIT) Antibody - 600-401-J98
Item No.:	600-401-J98
Size:	50 µg
Applications:	Dot Blot, IF, Multiplex, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	Histones of the nucleosome build chromatin and undergo various post-translational modifications proven to regulate chromatin condensation and DNA accessibility. Histone H3 methylations on Lysine 4 is modified by Set7/9 enzyme and is associated with transcriptional activation. Acetylated Lysine 9 has been studied in regards to transcriptional activation and histone deposition. Anti-Histone H3 K4-Me3/K9-Ac antibody is ideal for researchers interested in Chromatin Modifiers, Chromatin Research, Histones and Modified Histones, and Epigenetics research.
Synonyms:	rabbit anti-Histone H3 trimethyl Lys4 Ac Lys9 antibody, H3.3B, H3 histone, family 3A, H3.3AH3F3H3F3B, histone H3.3, MGC87783, MGC87782, H3 K4me3K9ac
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	HIST2H3C
Reactivity:	Human, Mouse
PTM Specificity:	Dual Modification
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-Histone H3 K4-Me3/K9-Ac affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide with a methylation surrounding Lysine 4 and an acetylation surrounding Lysine 9 of human Histone H3.
Purity/Specificity:	Anti-Histone H3 [Trimethyl Lys4/ac Lys9] was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross-reactivity with Human, mouse, rat, and C. elegans based on 100% sequence homology. Cross-reactivity with Histone H3 K4-Me3/K9-Ac from other sources has not been determined.
Relevant Links:	• UniProtKB - Q71DI3

Application Details

Tested Applications:	Dot Blot, IF, Multiplex, WB
Application Note:	Anti-Histone H3 K4-Me3/K9-Ac antibody is tested for dot blot, IF, and Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~15.4kDa corresponding to the appropriate cell lysate or extract. Epi-Plus™ antibody production in collaboration with Novus Biologicals.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IF:	1:10
WB:	1:1000
Other:	Dot Blot: 0.5-1.0µg/mL

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	0.46mg/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:	30% Glycerol

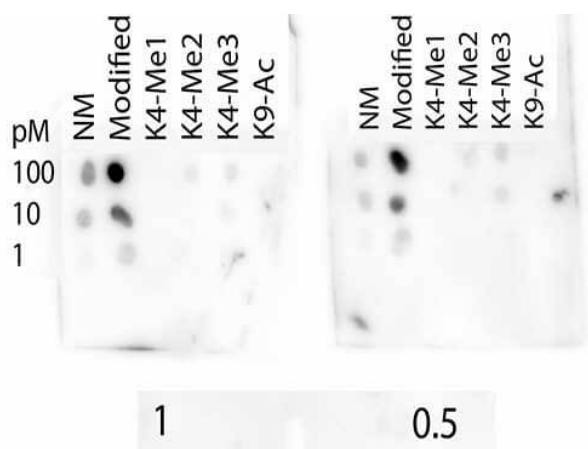
Shipping & Handling

Shipping Condition:	Dry Ice
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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.

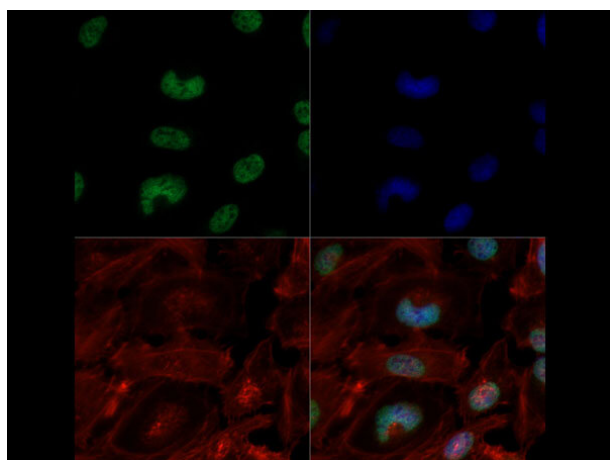
Expiration: Expiration date is one (1) year from date of receipt.

Images



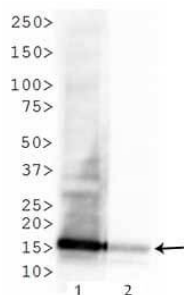
Dot Blot

Dot Blot of Rabbit Histone H3 K4-Me3/K9-Ac Antibody. Lane 1: K4/K9 unmodified. Lane 2: K4-Me3/K9-Ac. Lane 3: K4-Me1. Lane 4: K4-Me2. Lane 5: K4-Me3. Lane 6: K9-Ac. Load: 1, 10, and 100 picomoles of peptide. Primary antibody: Histone H3 K4-Me3/K9-Ac (RABBIT) antibody at 1:1000 for 45 min at 4°C. Secondary antibody: RABBIT IgG (H&L) Secondary Antibody Peroxidase Conjugated Pre-adsorbed at 1:40,000 for 30 min at RT. Block: 5% BLOTTO 30 minutes at RT.



Immunofluorescence Microscopy

Immunofluorescence of Anti-Histone H3 Me3 K4/Ac K9 me1: Histone H3 Trimethyl Lys4/ac Lys9 antibody was tested at 1:10 in HeLa cells with FITC (green). Cells and nuclei were counterstained with DAPI (blue) and DyLight 550 (red). (40X)



Western Blot

Western Blot of Histone H3 K4-Me3/K9-Ac (RABBIT) Antibody. Western Blot analysis against untreated cell extracts. Lane 1: Histone H3 nuclear marker. Lane 2: 3T3 cell lysates. Load: 35 µg per lane. Primary antibody: Histone H3 K4-Me3/K9-Ac antibody at 1.0 µg/mL for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 15 kDa for Histone H3 K4-Me3/K9-Ac. Other band(s): none.

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.