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www.rockland.com
tech@rockland.com
+1 484.791.3823

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

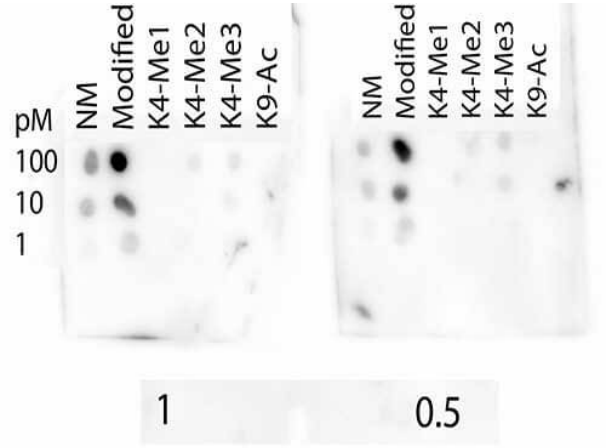
Physical State:	Liquid (sterile filtered)
Concentration:	0.46mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	30% Glycerol

Shipping & Handling

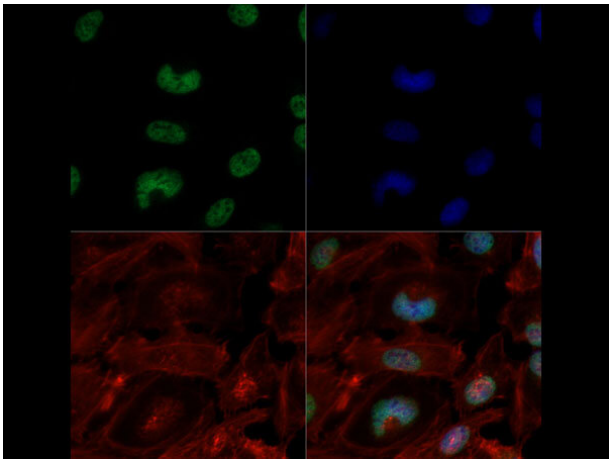
Shipping Condition:	Dry Ice

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.

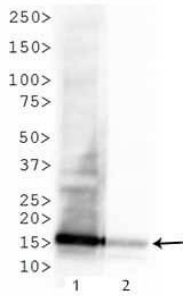
Images



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.

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