

Datasheet for 100-401-BR9**Histone H4 Antibody****Overview**

Description:	Anti-Histone H4 (RABBIT) Antibody - 100-401-BR9
Item No.:	100-401-BR9
Size:	100 µL
Applications:	Dot Blot, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Histones are the main constituents of the protein part of chromosomes of eukaryotic cells. They are rich in the amino acids arginine and lysine and have been greatly conserved during evolution. Histones pack the DNA into tight masses of chromatin. Two core histones of each class H2A, H2B, H3 and H4 assemble and are wrapped by 146 base pairs of DNA to form one octameric nucleosome. Histones play a internal role in the regulation of transcription, DNA repair, DNA replication and chromosomal stability. These different functions are established via a complex set of post-translational modifications which either directly or indirectly alter chromatin structure and DNA accessibility to facilitate transcriptional activation or repression or other nuclear processes. Anti-Histone H4 pan Antibody is ideal for research in Chromatin Remodeling, Gene Expression and Epigenetics.
Synonyms:	rabbit anti-Histone H4 antibody, Histone H4, HIST1H4B, HIST1H4C, HIST1H4D, HIST1H4E, HIST1H4F, HIST1H4H, HIST1H4I, HIST1H4J, HIST1H4K, HIST1H4L, HIST2H4A, HIST2H4B, HIST4H4
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	HIST1H4A
Reactivity:	Human
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-Histone H4 pan Antibody was produced in rabbits by repeated immunizations with a synthetic peptide containing a sequence from the N-terminal region of histone H4.
Purity/Specificity:	Anti-Histone H4 pan Antibody antiserum is directed against Histone H4. Cross reactivity with other species was not tested.
Relevant Links:	• 100-401-BR9 SDS • UniProtKB - P62805 • GeneID - 121504 • NCBI - NP_001029249

Application Details

Tested Applications:	Dot Blot, WB
Application Note:	Anti-Histone H4 pan Antibody is tested for Western Blot and Dot Blots. This antibody is suitable for Chromatin Immunoprecipitation and ELISA. Expect a single band approximately 11.3 kDa in size corresponding to H4 by western blot in the appropriate tissue or cell lysate. 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:	1:20000
WB:	1:500-1:2000
Other:	Dot Blot: 1:1000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	90 mg/mL by Refractometry
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

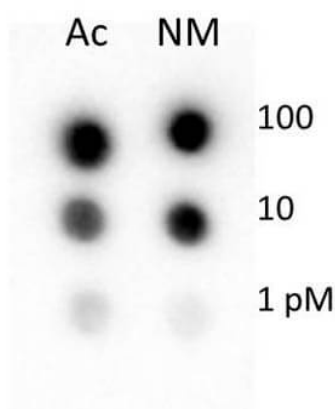
Shipping & Handling

Shipping Condition:	Dry Ice
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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.

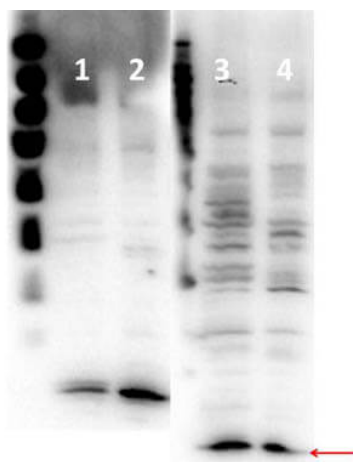
Expiration: Expiration date is one (1) year from date of receipt.

Images



Dot Blot

Dot Blot of Rabbit Histone H4 Antibody. Lane 1: AC. Lane 2: NM. Load: 100, 10, 1 picomoles of peptide. Primary antibody: Histone H4 antibody at 1:1000 for 45 min at 4°C. Secondary antibody: Gt-anti-Rb IgG HRP secondary antibody (p/n 611-103-122) at 1:10,000 for 45 min at RT. Block: 5% BLOTTO (p/n B501-0500) overnight at 4°C.



Western Blot

Western Blot of Rabbit anti-Histone H4 antibody. Lane 1: HeLa Whole Cell Lysate (p/n W09-000-364). Lane 2: HeLa Nuclear Extract (p/n W09-001-367). Lane 3: HeLa Whole Cell Lysate (p/n W09-000-364). Lane 4: HeLa Nuclear Extract (p/n W09-001-367). Load: 15 µg per lane. Primary antibody: Lanes 1-2: Histone H3 K18Ac, Lanes 3-4: Histone H4 antibody at 1:500 for overnight at 4°C. Secondary antibody: HRP rabbit secondary antibody (p/n 611-103-122) at 1:40,000 for 45 min at RT. Block: (p/n MB-070) overnight at 4°C. Predicted/Observed size: ~15.4kDa for Histone H3, and 11.3kDa for Histone H4.

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.