

### **Anti-Histone H4 (RABBIT) Antibody**

Histone H4 Antibody Catalog # ASR3736

## **Specification**

## Anti-Histone H4 (RABBIT) Antibody - Product Information

Host Rabbit

Conjugate
Target Species
Reactivity
Clonality
Application

Unconjugated
Human
Human
Polyclonal
WB, E, I, LCI

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. Liquid (sterile filtered)

Buffer 0.02 M Potassium Phosphate, 0.15 M

Sodium Chloride, pH 7.2

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.

Preservative 0.01% (w/v) Sodium Azide

#### Anti-Histone H4 (RABBIT) Antibody - Additional Information

Gene ID 121504;554313;8294;8359;8360;8361;8362;8363;8364;8365;8366;8367;8368;8370

**Other Names** 

**Physical State** 

121504

#### **Purity**

Anti-Histone H4 pan Antibody antiserum is directed against Histone H4. Cross reactivity with other species was not tested.

# **Storage Condition**

Store vial at  $-20^{\circ}$  C prior to opening. Aliquot contents and freeze at  $-20^{\circ}$  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  $4^{\circ}$  C as an undiluted liquid. Dilute only prior to immediate use.

### **Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.



# Anti-Histone H4 (RABBIT) Antibody - Protein Information

#### Name H4C1

Synonyms H4/A, H4FA, HIST1H4A

#### **Function**

Core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling.

#### **Cellular Location**

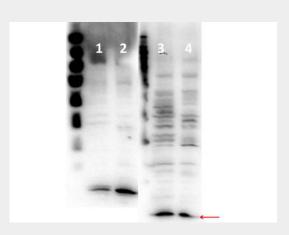
Nucleus {ECO:0000250|UniProtKB:P62806}. Chromosome. Note=Localized to the nucleus when acetylated in step 11 spermatids. {ECO:0000250|UniProtKB:P62806}

# Anti-Histone H4 (RABBIT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Anti-Histone H4 (RABBIT) Antibody - Images



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  $\mu$ g 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.





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## Anti-Histone H4 (RABBIT) Antibody - 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.