

# Anti-Histone H3 (Rabbit) Antibody

Histone H3 Antibody Catalog # ASR4467

## Specification

## Anti-Histone H3 (Rabbit) Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Rabbit Unconjugated Human Human Polyclonal WB, IHC, E, I, LCI Histone H3 antibody has been tested for use in ELISA and western blot. This antibody is suitable for IHC. For western blots expect a band of approximately 15.4 kDa in size corresponding to the Histone 3 protein. Specific conditions for reactivity should be optimized by the end user.
Physical State Buffer	Liquid (sterile filtered) 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	Anti-Histone-3 was prepared from whole rabbit serum produced by repeated immunizations with a peptide corresponding to the c-terminus region of human histone-3.
Preservative	0.01% (w/v) Sodium Azide

## Anti-Histone H3 (Rabbit) Antibody - Additional Information

Gene ID 8350;8351;8352;8353;8354;8355;8356;8357;8358;8968

Other Names 8350

### Purity

Anti-Histone H3 is directed against the human histone 3 protein. The product was protein A purified from monospecific antiserum by immunoaffinity chromatography using protein A coupled to agarose beads. A BLAST analysis was used to suggest reactivity with human and multiple other eukaryotic. Cross-reactivity with histone-3 from other sources have not been determined.

### Storage Condition

Store H3 Antibody 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.

#### **Precautions Note**

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



## Anti-Histone H3 (Rabbit) Antibody - Protein Information

Name H3C1 (<u>HGNC:4766</u>)

Synonyms H3FA, HIST1H3A

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. Chromosome.

### Anti-Histone H3 (Rabbit) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- <u>Flow Cytomety</u>
- <u>Cell Culture</u>

### Anti-Histone H3 (Rabbit) Antibody - Images



Western Blot of Rabbit Anti-Histone H3 antibody. Lane 1: Hela WCL (p/n W09-000-364). Lane 2: Hela Nuclear Extract (p/n W09-001-367). Load: 10  $\mu$ g per lane. Primary antibody: Histone H3 antibody at 1.0  $\mu$ g/ml for 1 hr at RT. Secondary antibody: HRP Gt-a-Rb IgG secondary antibody (p/n 611-103-122) at 1:40,000 for 30 min at RT. Block: MB-070 overnight at 4°C. Predicted/Observed size: ~15 kDa, ~15 kDa for Histone H3.

### Anti-Histone H3 (Rabbit) Antibody - Background



Histone H3 is one of the five main histone proteins involved in the structure of chromatin in eukaryotic cells. Histone proteins are highly post-translationally modified with Histone H3 being the most extensively modified of the five histones. The N-terminal tail of histone H3 protrudes from the globular nucleosome core and can undergo several different types of post-translational modification that influence cellular processes. 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. Histone H3 Antibody is ideal for investigators involved in Cell Signaling, Epigenetics, Nuclear Signaling research and Signal Transduction research.