

**Anti-Methyl-Histone H3 (di K4) HIST1H3A Rabbit Monoclonal Antibody**  
**Catalog # ABO14306****Specification****Anti-Methyl-Histone H3 (di K4) HIST1H3A Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC, IF, ICC, IP, FC
Primary Accession	<a href="#">P68431</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-Methyl-Histone H3 (di K4) HIST1H3A Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

**Anti-Methyl-Histone H3 (di K4) HIST1H3A Rabbit Monoclonal Antibody - Additional Information**

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

**Other Names**

Histone H3.1, Histone H3/a, Histone H3/b, Histone H3/c, Histone H3/d, Histone H3/f, Histone H3/h, Histone H3/i, Histone H3/j, Histone H3/k, Histone H3/l, H3C1 ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=4766](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=4766)), H3FA, HIST1H3A

**Calculated MW**

15404 MW KDa

**Application Details**

WB 1:500-1:2000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>IP 1:50<br>FC 1:50

**Subcellular Localization**

Nucleus. Chromosome.

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human Methyl-Histone H3 (di K4)

**Purification**

Affinity-chromatography

**Storage**

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for**

**up to one month. Avoid repeated freeze-thaw cycles.**

### **Anti-Methyl-Histone H3 (di K4) HIST1H3A Rabbit Monoclonal Antibody - Protein Information**

**Name** H3C1 ([HGNC:4766](#))

**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**

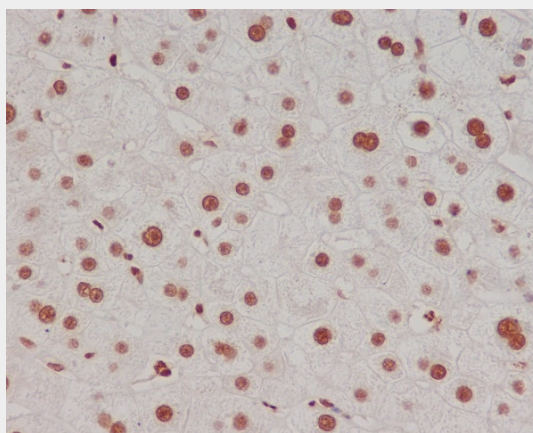
Nucleus. Chromosome.

### **Anti-Methyl-Histone H3 (di K4) HIST1H3A Rabbit Monoclonal 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 Cytometry](#)
- [Cell Culture](#)

### **Anti-Methyl-Histone H3 (di K4) HIST1H3A Rabbit Monoclonal Antibody - Images**



Immunohistochemical analysis of paraffin-embedded human liver, using Methyl-Histone H3 (di K4) Antibody(M12477-1)  
HIST1H3A was detected in paraffin-embedded tissue section. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was

blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-HIST1H3A Antibody (M12477-1) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

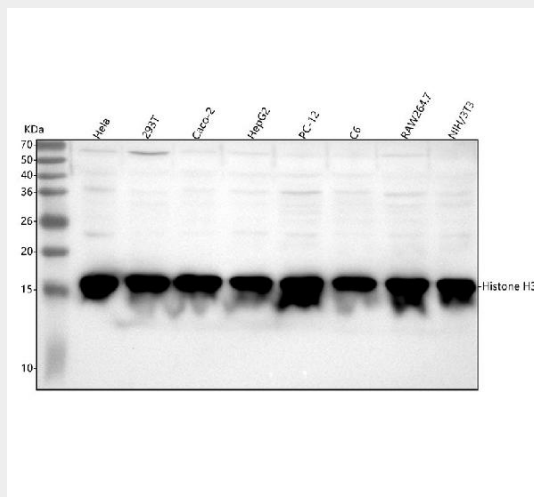


Figure 1. Western blot analysis of Methyl-Histone H3 (di K4) using anti-Methyl-Histone H3 (di K4) antibody (M12477-1).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: human 293T whole cell lysates,

Lane 3: human CACO-2 whole cell lysates,

Lane 4: human HepG2 whole cell lysates,

Lane 5: rat PC-12 whole cell lysates,

Lane 6: rat C6 whole cell lysates,

Lane 7: mouse RAW264.7 whole cell lysates,

Lane 8: mouse NIH/3T3 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Methyl-Histone H3 (di K4) antigen affinity purified monoclonal antibody (Catalog # M12477-1) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Methyl-Histone H3 (di K4) at approximately 15 kDa. The expected band size for Methyl-Histone H3 (di K4) is at 15 kDa.