

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
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/l, H3C1 (HGNC: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 (<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

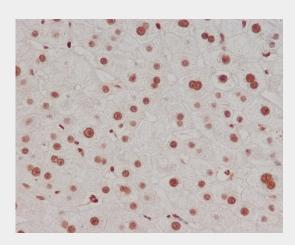
Nucleus. Chromosome.

Anti-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
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cvtometv
- 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 1 μ 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 Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

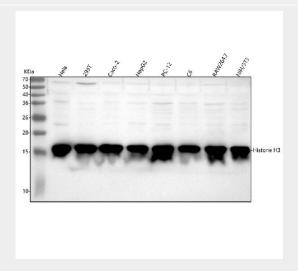


Figure 1. Western blot analysis of Methyl-Histone H3 (di K4) using anti-Methyl-Histone H3 (di K4) antibody (M12477-1).

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.