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Histone H3
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8433

Specification

Histone H3 - Product Information

Application	**WB,E**
Primary Accession	P68431
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**

Histone H3 - 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 (HGNC:4766), H3FA, HIST1H3A

Target/Specificity
This antibody is generated from a mouse immunized with a KLH conjugated synthetic peptide between 1-136 amino acids from human.

Dilution
WB~~1:500-1:1000

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Histone H3 is for research use only and not for use in diagnostic or therapeutic procedures.

Histone H3 - 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.

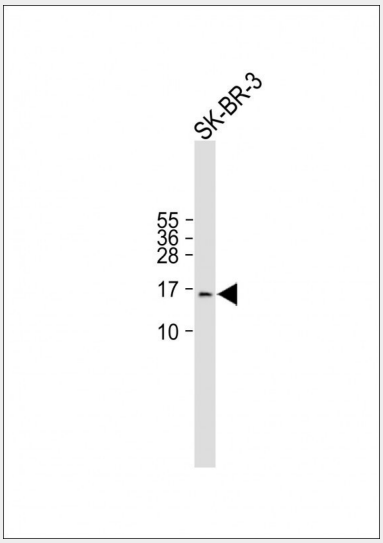
Cellular Location
Nucleus. Chromosome.

Histone H3 - 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

Histone H3 - Images



All lanes : Anti-Histone H3 at 1:500 dilution Lane 1: SK-BR-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Mouse IgG/A/M(H/L), Peroxidase conjugated at 1/2000 dilution. Observed band size : 15kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Histone H3 - Background

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.

Histone H3 - References

Zhong R.,et al.Nucleic Acids Res. 11:7409-7425(1983).
Marashi F.,et al.Biochem. Cell Biol. 64:277-289(1986).
Albig W.,et al.Genomics 10:940-948(1991).
Kardalinou E.,et al.J. Cell. Biochem. 52:375-383(1993).
Runge D.,et al.Submitted (OCT-1994) to the EMBL/GenBank/DDBJ databases.

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Histone H3 - Citations

- Isorhynchophylline ameliorates paraquat-induced acute kidney injury by attenuating oxidative stress and mitochondrial damage via regulating toll-interacting expression
- Inhibition of SGLT1 protects against glycemic variability-induced cardiac damage and pyroptosis of cardiomyocytes in diabetic mice
- Protective effect of toll-interacting protein overexpression against paraquat-induced lung injury in mice and A549 cells through inhibiting oxidative stress, inflammation, and NF-κB signaling pathway
- Intermittent high glucose induces pyroptosis of rat H9C2 cardiomyocytes via sodium-glucose cotransporter 1
- Involvement of miR-27a-3p in diabetic nephropathy via affecting renal fibrosis, mitochondrial dysfunction, and endoplasmic reticulum stress
- Suppression of autophagy through JAK2/STAT3 contributes to the therapeutic action of rhynchophylline on asthma
- Paeoniflorin accelerates foot wound healing in diabetic rats though activating the Nrf2 pathway
- Paeoniflorin inhibited nod-like receptor protein-3 inflammasome and NF-κB-mediated inflammatory reactions in diabetic foot ulcer by inhibiting the chemokine receptor CXCR2
- HOXB5 promotes proliferation, migration, and invasion of pancreatic cancer cell through the activation of the GSK3β/β-catenin pathway
- Tectorigenin inhibits inflammation and pulmonary fibrosis in allergic asthma model of ovalbumin-sensitized guinea pigs
- Polydatin ameliorates chemotherapy-induced cognitive impairment (chemobrain) by inhibiting oxidative stress, inflammatory response, and apoptosis in rats
- miR-29c-3p inhibits microglial NLRP3 inflammasome activation by targeting NFAT5 in Parkinson's disease
- MiR-144-5p limits experimental abdominal aortic aneurysm formation by mitigating M1 macrophage-associated inflammation: Suppression of TLR2 and OLR1
- Icariside II attenuates eosinophils-induced airway inflammation and remodeling via inactivation of NF-κB and STAT3 in an asthma mouse model
- Coptisine ameliorates renal injury in diabetic rats through the activation of Nrf2 signaling pathway