

# Histone H3 Antibody

Purified Mouse Monoclonal Antibody (Mab) Catalog # AM8433

#### **Product Information**

Application	WB, IHC-P, E
Primary Accession	<u>P68431</u>
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Clone Names	809CT10.4.2
Calculated MW	15404

### **Additional Information**

Gene ID	8350;8351;8352;8353;8354;8355;8356;8357;8358;8968
Other Names	Histone H31, 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, HIST1H3A, H3FA
Target/Specificity	This Histone H3 antibody is generated from a mouse immunized with Histone H3 recombinant protein.
Dilution	WB~~1:2000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
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 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **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.

#### 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.

### 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.

#### 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.

## 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
- <u>Protective effect of toll-interacting protein overexpression against paraquat-induced lung injury in mice and A549 cells</u> <u>through inhibiting oxidative stress, inflammation, and NF-κB signaling pathway</u>
- 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
- <u>Tectorigenin inhibits inflammation and pulmonary fibrosis in allergic asthma model of ovalbumin-sensitized guinea</u> <u>pigs</u>

- 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\_
- Role of allograft inflammatory factor-1 in the regulation of inflammation and oxidative stress in primary peritoneal mesothelial cells.
- miR-196a-5p promotes metastasis of colorectal cancer via targeting ΙκΒα.
- TRAF-interacting protein with forkhead-associated domain (TIFA) transduces DNA damage-induced activation of NF-κB.
- Nucleolar and coiled-body phosphoprotein 1 (NOLC1) regulates the nucleolar retention of TRF2.
- Anterior gradient 2 is induced in cutaneous wound and promotes wound healing through its adhesion domain.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.