

Anti-Macro H2A.1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

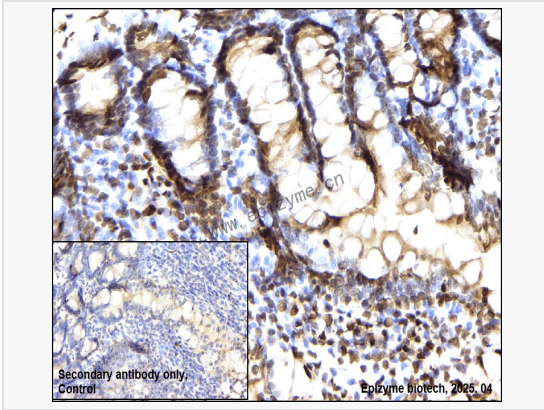
Catalog # R015434

Product Information

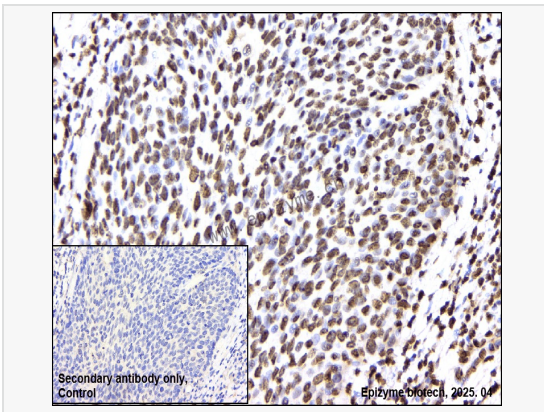
Application	WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	80B85H86
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human macroH2A.1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Macro H2A.1 Rabbit mAb [80B85H86] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

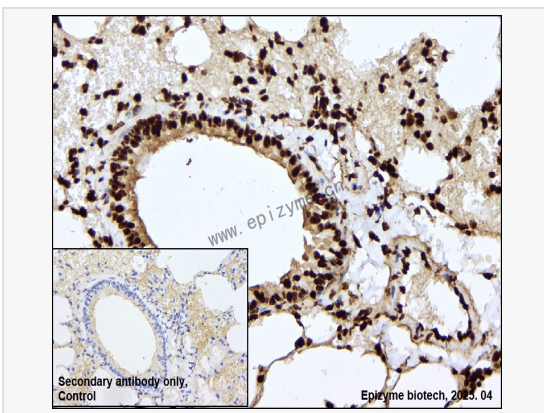
Synonyms	Core histone macro h2a.1; Core histone macro-H2A.1; H2A histone family member Y; H2A.y; H2A/y; H2AF12M; H2AFJ; H2afy; H2AY_HUMAN; Histone H2A.Y; Histone macroH2A1; Histone macroH2A1.1; Histone macroH2A1.2; Macroh2a1; MACROH2A1.1; MacroH2A1.2; Medulloblastoma antigen MU MB 50.205; Medulloblastoma antigen MU-MB-50.205; mH2a; mH2A1.
Calculated MW	Calculated MW: 40 kDa; Observed MW: 40 kDa
Uniprot ID	O75367
Gene ID	9555
Background	Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. This gene encodes a replication-independent histone that is a member of the histone H2A family. It replaces conventional H2A histones in a subset of nucleosomes where it represses transcription and participates in stable X chromosome inactivation. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Oct 2015]
Cellular Location	Nucleus. Chromosome. Enriched in inactive X chromosome chromatin and in senescence-associated heterochromatin.
Tissue Location	Ubiquitous.



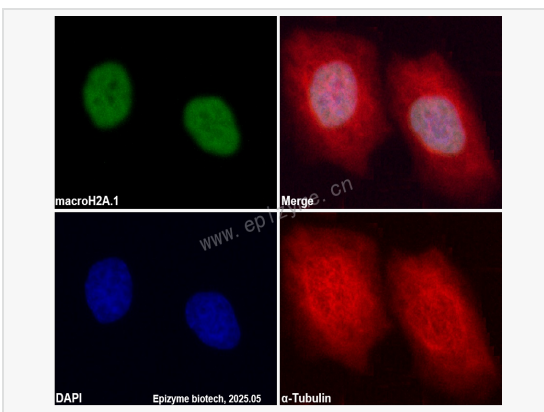
Immunohistochemistry - Anti-Macro H2A.1 Rabbit mAb [80B85H86]
 Sample: Paraformaldehyde-fixed, paraffin embedded rat colon tissue
 Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
 Primary antibody: R015434 at 1:200 dilution
 Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
 DAB was used as the chromogen.
 Counter stained with hematoxylin.
 Positive/negative staining were presented.
 Only the secondary antibody was used as the negative control.



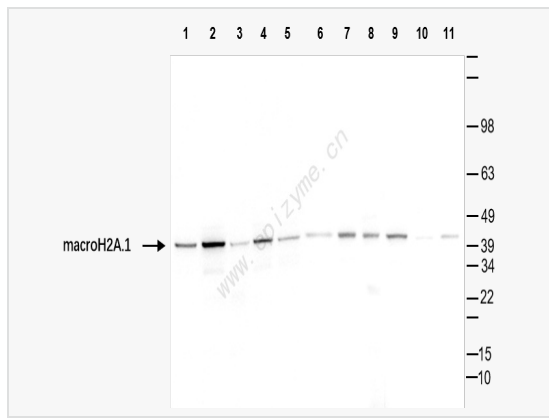
Immunohistochemistry - Anti-Macro H2A.1 Rabbit mAb [80B85H86]
 Sample: Paraformaldehyde-fixed, paraffin embedded human cervical cancer tissue
 Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
 Primary antibody: R015434 at 1:200 dilution
 Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
 DAB was used as the chromogen.
 Counter stained with hematoxylin.
 Positive/negative staining were presented.
 Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-Macro H2A.1 Rabbit mAb [80B85H86]
 Sample: Paraformaldehyde-fixed, paraffin embedded mouse lung tissue
 Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.
 Primary antibody: R015434 at 1:200 dilution
 Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
 DAB was used as the chromogen.
 Counter stained with hematoxylin.
 Positive/negative staining were presented.
 Only the secondary antibody was used as the negative control.



Immunofluorescence - Anti-Macro H2A.1 Rabbit mAb [80B85H86]
 Sample: HeLa cells
 The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
 Primary antibodies: R015434 at 1:100 dilution and α -tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution
 Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)
 Nuclei were stained with DAPI (shown in blue).



Western Blot - Anti-Macro H2A.1 Rabbit mAb [80B85H86]

All lanes: R015434 at 1:1,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: Huh1 (Human hepatocarcinoma epithelial cell) whole cell lysates

Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 4: T24 (Human bladder cancer epithelial cell) whole cell lysates

Lane 5: U87 (Human malignant glioblastoma epithelial cell) whole cell lysates

Lane 6: SH-SY5Y (Human neuroblastoma epithelial cell) whole cell lysates

Lane 7: C2C12 (Mouse myoblasts epithelial cell) whole cell lysates

Lane 8: Mouse brain whole tissue lysates

Lane 9: PC-12 (Rat adrenal pheochromocytoma epithelial cell) whole cell lysates

Lane 10: Rat heart whole tissue lysates

Lane 11: Rat liver whole tissue lysates

Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 40 kDa

Observed band size: 40 kDa

Developed using the ECL technique (Cat. No. SQ201).