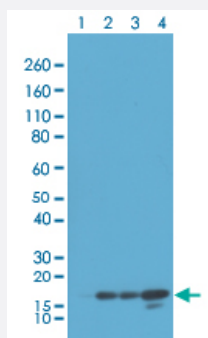


RecomAb™

# Histone H3 (K4) monoclonal antibody, clone RM186

Catalog # MAB12789      Size 100 ug

## Applications

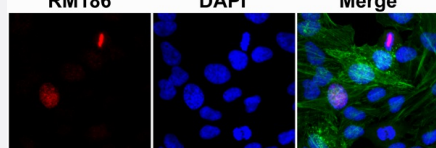


### Western Blot

Western blot analysis of Lane 1: acid extracts of HeLa cell treated with sodium butyrate (HeLa+NaBu), Lane 2: acid extracts of HeLa cell treated with Nocodazole (HeLa+Noc), Lane 3: acid extracts of HeLa cell untreated and Lane 4: recombinant Histone H3.1 with Histone H3 (K4) monoclonal antibody, clone RM186 (Cat # MAB12789) at 1 ug/mL working concentration, showed a band of Histone H3 with unmodified Lysine 4.

### Immunocytochemistry

Immunocytochemical staining of HeLa cells treated with sodium butyrate, using Histone H3 (K4) monoclonal antibody, clone RM186 (Cat# MAB12789) (red). Actin filaments have been labeled with fluorescein phalloidin (green).



This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

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Histone H3 (K4) monoclonal antibody, clone RM186 (Cat# MAB12789) specifically recognizes Histone H3 unmodified at Lys4 and does not recognize acetylated, mono- methylated, dimethylated, or trimethylated Lys4. The antibody binding specificity allows for modifications of Arg2 or Thr3 in histone H3.

## Specification

Product Description	Rabbit recombinant monoclonal antibody raised against of human histone H3 (K4).
Antibody Species	Rabbit
Immunogen	Original antibody is raised against a synthetic peptide corresponding to residues surrounding K4 at N-terminus region of human Histone H3.
Sequence	N/A
Specificity	This antibody recognizes Histone H3 that is unmodified at Lys 4 but does not recognize acetylated or methylated Lys 4. The antibody binding specificity allows for modifications of Arg 2, Thr 3, and/or other modifications in Histone H3.
Form	Liquid
Purification	Protein A purification
Isotype	IgG
Recommend Usage	ELISA (0.5 ug/mL-1 ug/mL) Western Blot (1 ug/mL-2 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (50% glycerol, 1% BSA, 0.09% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.

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- Enzyme-linked Immunoabsorbent Assay

## Gene Info — HIST1H3A

Entrez GeneID	<a href="#">8350</a>
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Protein Accession#	<a href="#">Q16695</a>
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Gene Name	HIST1H3A
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Gene Alias	H3/A, H3FA
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Gene Description	histone cluster 1, H3a
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Omim ID	<a href="#">602810</a>
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Gene Ontology	<a href="#">Hyperlink</a>
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**Gene Summary**

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped around a nucleosome, an 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 is intronless and encodes a member of the histone H3 family. Transcripts from this gene lack polyA tails; instead, they contain a palindromic termination element. This gene is found in the large histone gene cluster on chromosome 6p22-p21.3. [provided by RefSeq]

**Other Designations**

H3 histone family, member A|histone 1, H3a

**Pathway**

- [Systemic lupus erythematosus](#)