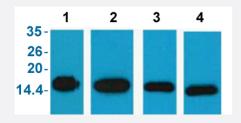


Histone H3 monoclonal antibody, clone 1G1

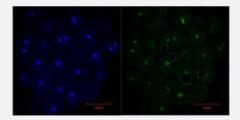
Catalog # MAB15247 Size 100 uL

Applications



Western Blot

Western Blot analysis of Lane 1: HeLa cell, Lane 2: Raw 264.7 cell, Lane 3: mouse brain tissue and Lane 4: rat brain tissue.



Immunofluorescence

Immunofluorescence staining of HeLa cell line.

Specification	
Product Description	Mouse monoclonal antibody raised against full length recombinant human histone H3.
lmmunogen	Recombinant protein corresponding to full length human histone H3.
Host	Mouse
Reactivity	Human, Mouse, Rat
Form	Liquid
Purification	Affinity purification
Isotype	lgG1



Recommend Usage	Immunofluorescence (1:100-1:500) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (1:50-1:300) Immunoprecipitation (1:200) Western Blot (1:2000-1:5000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (50% glycerol, 0.5% BSA, 0.02% sodium azide).
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

Western Blot

Western Blot analysis of Lane 1: HeLa cell, Lane 2: Raw 264.7 cell, Lane 3: mouse brain tissue and Lane 4: rat brain tissue.

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)
- Immunofluorescence

Immunofluorescence staining of HeLa cell line.

Immunoprecipitation

Gene I	nfo —	HIST1	H3A
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Entrez GeneID	8350
Protein Accession#	<u>P68431</u>
Gene Name	HIST1H3A
Gene Alias	H3/A, H3FA
Gene Description	histone cluster 1, H3a
Omim ID	602810
Gene Ontology	<u>Hyperlink</u>



Gene Summary	Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chro mosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped ar ound 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, H 1, 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 t ails; instead, they contain a palindromic termination element. This gene is found in the large histon e gene cluster on chromosome 6p22-p21.3. [provided by RefSeq
Other Designations	H3 histone family, member A histone 1, H3a

Gene Info — HIST1H3D	
Entrez GeneID	<u>8351</u>
Protein Accession#	<u>P68431</u>
Gene Name	HIST1H3D
Gene Alias	H3/b, H3FB
Gene Description	histone cluster 1, H3d
Omim ID	<u>602811</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chro mosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, an d H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and f unctions in the compaction of chromatin into higher order structures. This gene is intronless and e ncodes a member of the histone H3 family. Transcripts from this gene lack polyA tails but instead contain a palindromic termination element. This gene is found in the large histone gene cluster on chromosome 6. [provided by RefSeq
Other Designations	H3 histone family, member B OTTHUMP00000016149 histone 1, H3d

Gene Info — HIST1H3C	
Entrez GenelD	<u>8352</u>
Protein Accession#	<u>P68431</u>
Gene Name	HIST1H3C
Gene Alias	H3.1, H3/c, H3FC



Gene Description	histone cluster 1, H3c
Omim ID	602812
Gene Ontology	<u>Hyperlink</u>
Gene Summary	Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chro mosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, an d H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and f unctions in the compaction of chromatin into higher order structures. This gene is intronless and e ncodes a member of the histone H3 family. Transcripts from this gene lack polyA tails but instead contain a palindromic termination element. This gene is found in the large histone gene cluster on chromosome 6. [provided by RefSeq
Other Designations	H3 histone family, member C histone 1, H3c

Gene Info — HIST1H3E	
Entrez GenelD	8353
Protein Accession#	<u>P68431</u>
Gene Name	HIST1H3E
Gene Alias	H3.1, H3/d, H3FD
Gene Description	histone cluster 1, H3e
Omim ID	602813
Gene Ontology	<u>Hyperlink</u>
Gene Summary	Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chro mosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, an d H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and f unctions in the compaction of chromatin into higher order structures. This gene is intronless and e ncodes a member of the histone H3 family. Transcripts from this gene lack polyA tails but instead contain a palindromic termination element. This gene is found in the large histone gene cluster on chromosome 6. [provided by RefSeq
Other Designations	H3 histone family, member D histone 1, H3e

Gene Info — HIST1H3I

Entrez GenelD 8354



Protein Accession#	<u>P68431</u>
Gene Name	HIST1H3I
Gene Alias	H3.f, H3/f, H3FF
Gene Description	histone cluster 1, H3i
Omim ID	602814
Gene Ontology	<u>Hyperlink</u>
Gene Summary	Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chro mosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, an d H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and f unctions in the compaction of chromatin into higher order structures. This gene is intronless and e ncodes a member of the histone H3 family. Transcripts from this gene lack polyA tails but instead contain a palindromic termination element. This gene is found in the small histone gene cluster on chromosome 6p22-p21.3. [provided by RefSeq
Other Designations	H3 histone family, member F OTTHUMP00000017803 histone 1, H3i

Gene Info — HIST1H3G		
Entrez GenelD	<u>8355</u>	
Protein Accession#	P68431	
Gene Name	HIST1H3G	
Gene Alias	H3/h, H3FH	
Gene Description	histone cluster 1, H3g	
Omim ID	<u>602815</u>	
Gene Ontology	<u>Hyperlink</u>	
Gene Summary	Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and unctions in the compaction of chromatin into higher order structures. This gene is intronless and encodes a member of the histone H3 family. Transcripts from this gene lack polyA tails but instead contain a palindromic termination element. This gene is found in the large histone gene cluster on chromosome 6. [provided by RefSeq	
Other Designations	H3 histone family, member H OTTHUMP00000016152 histone 1, H3g	



Gene Info — HIST1H3J	
Entrez GenelD	<u>8356</u>
Protein Accession#	<u>P68431</u>
Gene Name	HIST1H3J
Gene Alias	H3/j, H3FJ
Gene Description	histone cluster 1, H3j
Omim ID	602817
Gene Ontology	<u>Hyperlink</u>
Gene Summary	Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chro mosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, an d H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and f unctions in the compaction of chromatin into higher order structures. This gene is intronless and e ncodes a member of the histone H3 family. Transcripts from this gene lack polyA tails but instead contain a palindromic termination element. This gene is found in the small histone gene cluster on chromosome 6p22-p21.3. [provided by RefSeq
Other Designations	H3 histone family, member J OTTHUMP00000017804 histone 1, H3j

Gene Info — HIST1H3H	
Entrez GenelD	8357
Protein Accession#	P68431
Gene Name	HIST1H3H
Gene Alias	FLJ92264, H3/k, H3F1K, H3FK
Gene Description	histone cluster 1, H3h
Omim ID	602818
Gene Ontology	<u>Hyperlink</u>



Gene Summary	Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chro mosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, an d H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and f unctions in the compaction of chromatin into higher order structures. This gene is intronless and e ncodes a member of the histone H3 family. Transcripts from this gene lack polyA tails but instead contain a palindromic termination element. This gene is found in the small histone gene cluster on chromosome 6p22-p21.3. [provided by RefSeq
Other Designations	H3 histone family, member K histone 1, H3h

Gene Info — HIST1H3B	
Entrez GeneID	<u>8358</u>
Protein Accession#	<u>P68431</u>
Gene Name	HIST1H3B
Gene Alias	H3/I, H3FL
Gene Description	histone cluster 1, H3b
Omim ID	602819
Gene Ontology	<u>Hyperlink</u>
Gene Summary	Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chro mosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped ar ound 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, H 1, 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 t ails; instead, they contain a palindromic termination element. This gene is found in the large histon e gene cluster on chromosome 6p22-p21.3. [provided by RefSeq
Other Designations	H3 histone family, member L OTTHUMP00000016132 histone 1, H3b

Gene Info — HIST1H3F	
Entrez GenelD	<u>8968</u>
Protein Accession#	<u>P68431</u>
Gene Name	HIST1H3F
Gene Alias	H3/i, H3FI



Gene Description	histone cluster 1, H3f
Omim ID	602816
Gene Ontology	<u>Hyperlink</u>
Gene Summary	Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chro mosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped ar ound 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, H 1, 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 t ails; instead, they contain a palindromic termination element. This gene is found in the large histon e gene cluster on chromosome 6p22-p21.3. [provided by RefSeq
Other Designations	H3 histone family, member I OTTHUMP0000016151 histone 1, H3f

Pathway

- Systemic lupus erythematosus

Disease

- Abortion
- Genetic Predisposition to Disease
- Tobacco Use Disorder