

# Histone H3 (C-terminal) Monoclonal antibody

Catalog Number: **68503-1-Ig**

## Basic Information

<b>Catalog Number:</b> 68503-1-Ig	<b>GenBank Accession Number:</b> BC066245	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1000 µg/ml	<b>GeneID (NCBI):</b> 8350	<b>CloneNo.:</b> 2G10C3
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P68431	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:500-1:2000
<b>Isotype:</b> IgG2a	<b>Full Name:</b> histone cluster 1, H3a	
	<b>Observed MW:</b> 15 kDa	

## Applications

<b>Tested Applications:</b> IHC, WB, ELISA	<b>Positive Controls:</b>
<b>Species Specificity:</b> Human, mouse, rat, chicken, zebrafish, wheat	<b>WB :</b> LNCaP cells, HEK-293 cells, HeLa cells, Jurkat cells, HSC-T6 cells, NIH/3T3 cells, chicken brain tissue, zebrafish, wheat whole plant
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	<b>IHC :</b> mouse testis tissue,

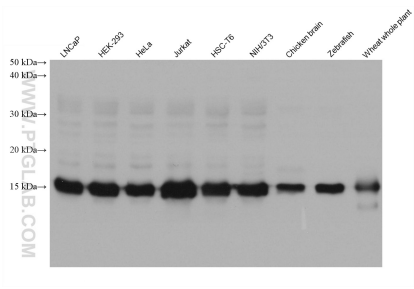
## Background Information

Histones are small, highly basic proteins that consist of a globular domain with unstructured N- and C-terminal tails protruding from the main structure. Histone H3 is one of the five main histones 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. In addition to their role in DNA compartmentalization, histones also play crucial roles in various biologic processes, including gene expression and regulation, DNA repair, chromatin condensation, cell cycle progression, chromosome segregation, and apoptosis. The ability of histones to regulate chromatin dynamics primarily originates from various posttranslational modifications carried out by histone-modifying enzymes.

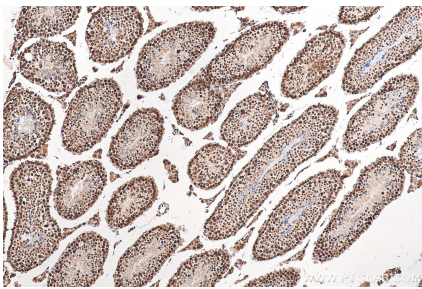
## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

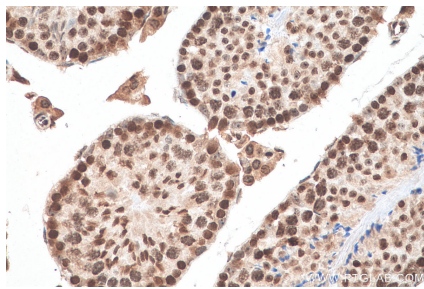
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68503-1-Ig (HIST1H3A antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using 68503-1-Ig (HIST1H3A antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using 68503-1-Ig (HIST1H3A antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).