

For Research Use Only

# CoraLite® Plus 488-conjugated Histone H3 Monoclonal antibody

Catalog Number: CL488-68345



## Basic Information

<b>Catalog Number:</b> CL488-68345	<b>GenBank Accession Number:</b> BC066245	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 8350	<b>CloneNo.:</b> 1A2A3
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P68431	<b>Recommended Dilutions:</b> IF/ICC 1:50-1:500
<b>Isotype:</b> IgG2b	<b>Full Name:</b> histone cluster 1, H3a	<b>Excitation/Emission maxima wavelengths:</b> 493 nm / 522 nm
	<b>Observed MW:</b> 15 kDa	

## Applications

<b>Tested Applications:</b> IF/ICC, FC (Intra)	<b>Positive Controls:</b> IF/ICC : HeLa cells,
<b>Species Specificity:</b> human, mouse, rat, chicken, zebrafish, wheat	

## 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.

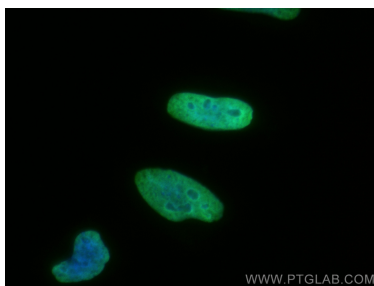
## Storage

**Storage:**  
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA  
**Aliquoting is unnecessary for -20°C storage**

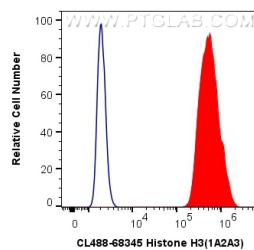
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Coralite® Plus 488 Histone H3 antibody (CL488-68345, Clone: 1A2A3 ) at dilution of 1:200.



$1 \times 10^6$  HepG2 cells were intracellularly stained with 0.8  $\mu$ g Coralite® Plus 488 Anti-Human Histone H3 (CL488-68345, Clone:1A2A3) (red), or 0.8  $\mu$ g Coralite® Plus 488 Mouse IgG2b Isotype Control (MPC-11) (CL488-65128, Clone: MPC-11) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).