

For Research Use Only

Mono-Methyl-Histone H3 (Lys56) Recombinant monoclonal antibody

Catalog Number: 87727-1-RR



Basic Information

Catalog Number: 87727-1-RR	GenBank Accession Number: BC066245	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 8350	CloneNo.: 253281A4
Source: Rabbit	UNIPROT ID: P68431	Recommended Dilutions: WB: 1:1000-1:6000 IF/ICC: 1:500-1:2000 Dot Blot: 1:500-1:2000 ChIP-qPCR: 1:10-1:100
Isotype: IgG	Full Name: histone cluster 1, H3a	
	Observed MW: 15-17 kDa	

Applications

Tested Applications: WB, IF/ICC, Dot Blot, ELISA, ChIP-qPCR	Positive Controls: WB : HeLa cells, HepG2 cells, HEK-293 cells, Jurkat cells, K-562 cells, NIH/3T3 cells, HSC-T6 cells
Species Specificity: human, mouse, rat	IF/ICC : HeLa cells, Dot Blot : / /, ChIP-qPCR : HeLa cells,

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

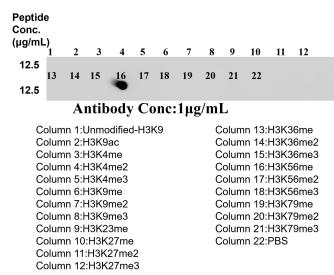
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

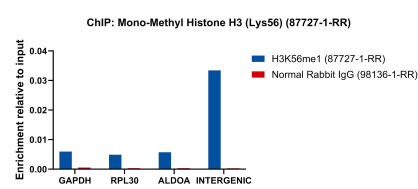
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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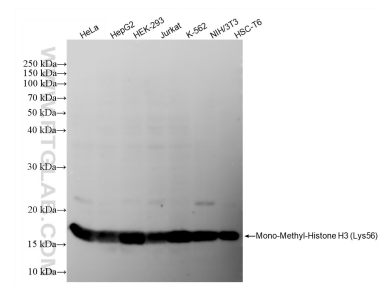
Selected Validation Data



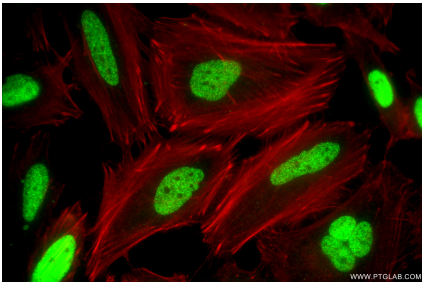
Dot blot analysis was used to confirm the specificity of 87727-1-RR Mono-Methyl-Histone H3 (Lys56) antibody. Peptides were spotted onto NC and probed with antibody at 1 µg/mL. The amount of peptide (µg/mL) spotted is indicated next to each row.



Chromatin was prepared from HeLa cells. Cells were fixed with formaldehyde for 10 minutes. The ChIP was performed with 15 µg of cross-linked chromatin, 5 µg of Mono-Methyl-Histone-H3 (Lys56) (87727-1-RR) or 5 µg of Normal Rabbit IgG (98136-1-RR), and 20 µl of Protein A Magarose Beads. The immunoprecipitated DNA was quantified by real-time PCR.



Various lysates were subjected to SDS PAGE followed by western blot with 87727-1-RR (Mono-Methyl-Histone H3 (Lys56) antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using Mono-Methyl-Histone H3 (Lys56) antibody (87727-1-RR, Clone: 253281A4) at dilution of 1:1000 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).