

For Research Use Only

# Histone H1.0 Recombinant antibody, PBS Only (Detector)

Catalog Number: 83993-1-PBS



## Basic Information

<b>Catalog Number:</b> 83993-1-PBS	<b>GenBank Accession Number:</b> BC000145	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 3005	<b>CloneNo.:</b> 241147D2
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P07305	
<b>Isotype:</b> IgG	<b>Full Name:</b> H1 histone family, member 0	
<b>Immunogen Catalog Number:</b> AG9982	<b>Calculated MW:</b> 21 kDa	
	<b>Observed MW:</b> 32 kDa	

## Applications

**Tested Applications:**  
WB, FC (Intra), Cytometric bead array, Sandwich ELISA,  
Indirect ELISA, Sample test

**Species Specificity:**  
human, mouse, rat

## Product Information

83993-1-PBS targets Histone H1.0 as part of a matched antibody pair:

MP00895-1: 83993-3-PBS capture and 83993-1-PBS detection (validated in Cytometric bead array, Sandwich ELISA)

MP00895-3: 83993-2-PBS capture and 83993-1-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## Background Information

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone 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. Linker histones are involved in forming higher order structure in chromatin and maintaining overall chromatin compaction. The H1FO histones are found in cells that are in terminal stages of differentiation or that have low rates of cell division. Histone H1.0 (H1FO, H1FV) is a linker histone that is widely expressed in many tissues and almost all vertebrates, unlike some other linker histones. The observed molecular weight of H1FO is about 32 kDa.

## Storage

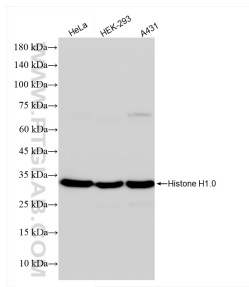
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

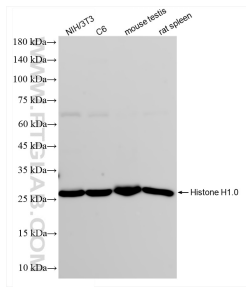
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

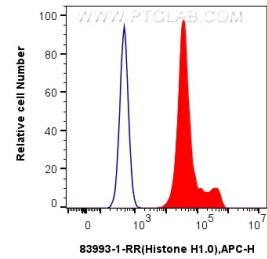
## Selected Validation Data



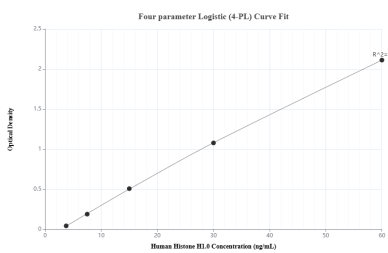
Various lysates were subjected to SDS PAGE followed by western blot with 83993-1-RR (Histone H1.0 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83993-1-PBS in a different storage buffer formulation.



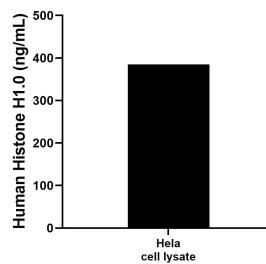
Various lysates were subjected to SDS PAGE followed by western blot with 83993-1-RR (Histone H1.0 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83993-1-PBS in a different storage buffer formulation.



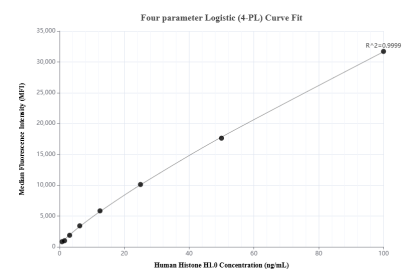
$1 \times 10^6$  BxPC-3 cells were intracellularly stained with 0.25 ug Histone H1.0 Recombinant antibody (83993-1-RR, Clone:241147D2) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set. This data was developed using the same antibody clone with 83993-1-PBS in a different storage buffer formulation.



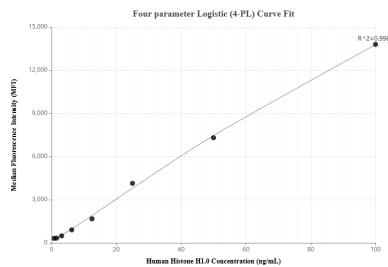
Sandwich ELISA standard curve of MP00895-1, Human Histone H1.0 Recombinant Matched Antibody Pair - PBS only. 83993-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag9982. 83993-1-PBS was HRP conjugated as the detection antibody. Range: 0.937-60 ng/mL



HeLa cell lysate was measured. The human Histone H1.0 concentration of detected samples was determined to be 385.31 ng/mL (based on a 2.0 mg/mL extract load).



Cytometric bead array standard curve of MP00895-1, Histone H1.0 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83993-3-PBS. Detection antibody: 83993-1-PBS. Standard: Ag9982. Range: 0.781-100 ng/mL



Cytometric bead array standard curve of MP00895-3, Histone H1.0 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83993-2-PBS. Detection antibody: 83993-1-PBS. Standard: Ag9982. Range: 0.781-100 ng/mL