

Anti-H4pan HIST1H4A Antibody

Catalog Number: CI1069

About HIST1H4A

Histones are the main constituents of the protein part of chromosomes of eukaryotic cells. They are rich in the amino acids arginine and lysine and have been greatly conserved during evolution. Histones pack the DNA into tight masses of chromatin. Two core histones of each class H2A, H2B, H3 and H4 assemble and are wrapped by 146 base pairs of DNA to form one octameric nucleosome. Histones play a central role in the regulation of transcription, DNA repair, DNA replication and chromosomal stability. These different functions are established via a complex set of post-translational modifications which either directly or indirectly alter chromatin structure and DNA accessibility to facilitate transcriptional activation or repression or other nuclear processes.

Overview

Product Name	Anti-H4pan HIST1H4A Antibody
Reactive Species	Human
Description	Boster Bio Anti-H4pan HIST1H4A Antibody (Catalog# CI1069). Tested in ChIP, ELISA, WB, IF applications. This antibody reacts with Human.
Application	ChIP, ELISA, IF, WB
Clonality	Polyclonal
Formulation	Affinity purified polyclonal antibody in PBS containing 0.05% azide and 0.05% ProClin 300.
Storage Instructions	Store at -20°C. For long-term storage, store at -80°C. Avoid multiple freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P62805

Technical Details

Immunogen	This antibody is raised in rabbit against histone H4 using a KLH-conjugated synthetic peptide containing an unmodified sequence from the central part of the protein.
Recommended Detection Systems	Boster recommends high sensitivity ChIP-seq Kit (CK1001 & CK1002) for Chromatin Immunoprecipitation.
Form	Liquid
Concentration	0.5-1mg/ml, actual concentration vary by lot. Use suggested dilution ratio to decide dilution procedure.
Purification	Affinity purified
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this

kit.

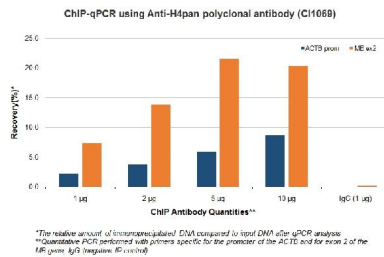
If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.

Some PubMed article(s) citing the expression level of this target are as follows:

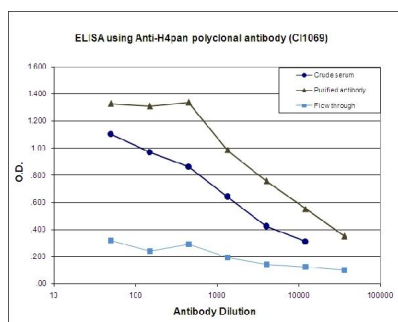
Boster Bio's internal QC testing used:

User needs to optimize the dilution ratio for this antibody.

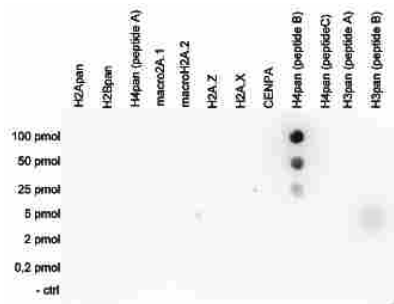
Anti-H4pan HIST1H4A Antibody (CI1069) Images



ChIP assays were performed using human HeLa cells, Anti-H4pan polyclonal antibody (Catalog # CI1069) and optimized PCR primer sets for qPCR. A titration of the antibody consisting of 1, 2, 5, and 10 µg per ChIP experiment was analysed. IgG (1 µg/IP) was used as negative IP control. QPCR was performed with primers for the ACTB promoter and for the second exon of the MB gene.



To determine the titer of the antibody, an ELISA was performed using a serial dilution of Anti-H4pan polyclonal antibody (Catalog # CI1069), crude serum and flow through in antigen coated wells. By plotting the absorbance against the antibody dilution, the titer of the antibody was estimated to be 1:11,250.



A Dot Blot analysis was performed to test the cross reactivity of Anti-H4pan polyclonal antibody (Catalog # CI1069) with the peptide used for immunization of the rabbit and other peptides containing unmodified sequences of different histones. One hundred to 0.2 pmol of the respective peptides were spotted on a membrane. The antibody was used at a dilution of 1:10,000. This figure shows a high specificity of the antibody for the specific peptide.

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