Datasheet for ABIN6971791

anti-Histone H2A antibody (pThr120)

2 Images

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Overview

Quantity:	100 µg
Target:	Histone H2A
Binding Specificity:	pThr120
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Histone H2A antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Dot Blot (DB)

Product Details

Immunogen:	This Histone H2A phospho Thr120 antibody was raised against a peptide containing phospho Thr120 of human histone H2A.
Isotype:	IgG
Characteristics:	Histone H2A is one of the core components of the nucleosome. The nucleosome is the smallest subunit of chromatin and consists of 147 base pairs of DNA wrapped around an octamer of core histone proteins (two each of Histone H2A, Histone H2B, Histone H3 and Histone H4). Histone H1 is a linker histone, present at the interface between the nucleosome core and DNA entry/exit points, it is responsible for establishing higher-order chromatin structure. Chromatin is subject to a variety of chemical modifications, including post-translational modifications of the histone proteins and the methylation of cytosine residues in the DNA. Reported histone modifications include acetylation, methylation, phosphorylation, ubiquitylation, glycosylation, ADP-ribosylation, carbonylation and SUMOylation, they play a

Product Details

	major role in regulating gene expression. Phosphorylation of histones occurs at multiple sites during mitosis. H2A Thr120 phosphorylation is observed on chromatin during both mitosis and meiosis. Thr120 phosphorylation is inversely correlated with ubiquitylation of H2A Lys119 in meiotic mouse spermatocytes. In Drosophila, loss of H2A Thr120 phosphorylation is associated with a failure to disassemble the synaptonemal complex, impaired loading of condensin and female infertility. It is possible that H2A Thr120 phosphorylation is involved in the regulation of chromatin structure. Histone H2AT120ph antibody (pAb) was raised in a Rabbit host. It has been validated for use in Dot blot, Immunofluorescence and Western blot, it has been shown to react with Human samples, but it is predicted that it will react with a wide range of sample types.
Purification:	Protein A Chromatography

Target Details

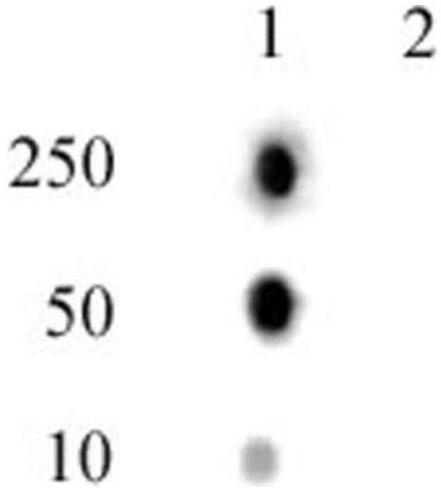
Target:	Histone H2A
Abstract:	Histone H2A Products
Molecular Weight:	14 kDa
NCBI Accession:	NP_003508

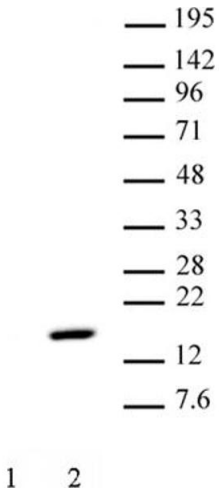
Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Buffer:	Purified IgG in PBS with 30 % glycerol and 0.035 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage.





Dot Blot

Image 1. Histone H2A phospho Thr120 pAb tested by dot blot analysis. Dot blot analysis was used to confirm the specificity of Histone H2A phospho Thr120 pAb for phospho Thr120 histone H2A. The modified and unmodified peptides to the immunogen were spotted onto PVDF and probed with the antibody at a dilution of 1 µg/mL . The amount of peptide (picomoles) spotted is indicated next to each row. Lane 1: Phospho Thr120 peptide. Lane 2: Unmodified Thr120 peptide.

Western Blotting

Image 2. Histone H2A phospho Thr120 pAb tested by Western blot. HeLa acid extract (10 µg per lane) was probed with Histone H2A phospho Thr120 pAb at a dilution of 1 µg/mL . Lane 1: No treatment. Lane 2: Cells treated with colcemid to arrest cells at mitosis.