Datasheet for ABIN6971837

anti-Histone H3.1 antibody (pSer28)

2 Images

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Overview

Quantity:	100 µg
Target:	Histone H3.1 (HIST1H3B)
Binding Specificity:	pSer28
Reactivity:	Human
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This Histone H3.1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Immunogen:	This antibody was raised against a peptide corresponding to phospho-serine 28 of human Histone H3.1. This antibody does not react with Histone H3.3 phosphorylated on serine 28.
Clone:	5D10D4
Isotype:	IgG2b
Characteristics:	Histone H3 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). 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, these

Product Details

	modifications play a major role in regulating gene expression. There are three protein variants of Histone H3, Histone H3.1, 3.2 and 3.3. The incorporation of Histone H3.1 and H3.2 into nucleosomes is replication dependent, in contrast to Histone H3.3, which is independent of DNA synthesis and occurs throughout the cell cycle. Human Histone H3.1 and H3.3 are identical in amino acid sequences except at position 110 where H3.1 has a cysteine and H3.3 has a serine. Phosphorylation of serine 28 occurs in early mitosis when chromosomes begin to condense and during premature chromosome condensation induced in S-phase cells. Histone H3.1S28ph antibody (mAb) (Clone 5D10D4) was raised in a Rat host. It has been validated for use in Immunocytochemistry, 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 G Chromatography

Target Details

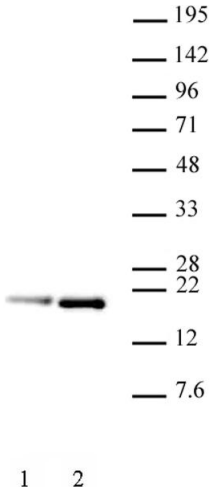
Target:	Histone H3.1 (HIST1H3B)
Alternative Name:	Histone H3.1 (HIST1H3B Products)
Molecular Weight:	17 kDa
NCBI Accession:	NP_003522

Application Details

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

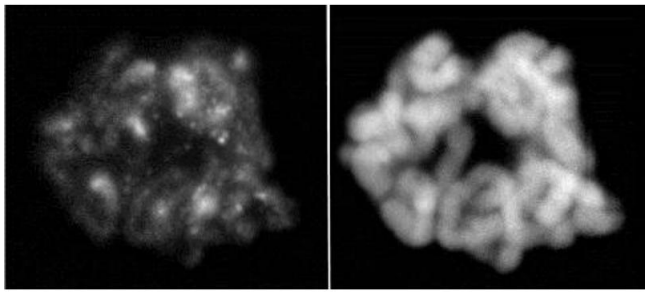
Handling

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.



Western Blotting

Image 1. Histone H3.1S28ph antibody (mAb) (Clone 5D10D4) tested by Western blot. Detection of Histone H3.1S28ph antibody by Western blot. The analysis was performed using 20 µg of untreated (lane 1) or colcemid treated (lane 2) HeLa nuclear extract with Histone H3.1S28ph antibody at a 1 µg/mL dilution.



Immunofluorescence

Image 2. Histone H3.1S28ph antibody (mAb) (Clone 5D10D4) tested by Immunofluorescence. Left: Formaldehyde fixed mitotic DM4 cell stained with Histone H3.1S28ph antibody (mAb). Right: Hoechst stain.