Histone H3 Antibody

Catalog No: #32667

Orders: order@signalwayantibody.com
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Description

Product Name	Histone H3 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB IHC IF IP CHIP
Species Reactivity	Hu Ms Rt Other (Wide Range)
Specificity	The antibody detects endogenous level of total Histone H3 protein.
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant protein of human Histone H3.
Target Name	Histone H3
Other Names	HIST1H3J; H3/j; H3FJ; HistoneH3.1; HistoneH3/a
Accession No.	Swiss-Prot:Q16695NCBI Gene ID:8290
SDS-PAGE MW	15KD
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

Western blotting: 1:500 - 1:2000

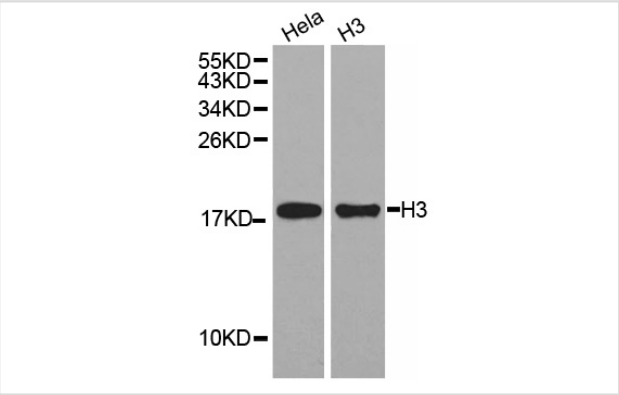
Immunohistochemistry: 1:50 - 1:100

Immunofluorescence: 1:50 - 1:200

Immunoprecipitation: 1:50 - 1:200

Chromatin immunoprecipitation: 1:20 - 1:100

Images



Western blot analysis of extracts of HeLa cell line and H3 protein expressed in E coli , using Histone H3 antibody.

Background

Modulation of chromatin structure plays an important role in the regulation of transcription in eukaryotes. The nucleosome, made up of DNA wound around eight core histone proteins (two each of H2A, H2B, H3, and H4), is the primary building block of chromatin (1). The amino-terminal tails of core histones undergo various post-translational modifications, including acetylation, phosphorylation, methylation, and ubiquitination (2-5). These modifications occur in response to various stimuli and have a direct effect on the accessibility of chromatin to transcription factors and, therefore, gene expression (6). In most species, histone H2B is primarily acetylated at Lys5, 12, 15, and 20 (4,7). Histone H3 is primarily acetylated at Lys9, 14, 18, 23, 27, and 56. Acetylation of H3 at Lys9 appears to have a dominant role in histone deposition and chromatin assembly in some organisms (2,3). Phosphorylation at Ser10, Ser28, and Thr11 of histone H3 is tightly correlated with chromosome condensation during both mitosis and meiosis (8-10). Phosphorylation at Thr3 of histone H3 is highly conserved among many species and is catalyzed by the kinase haspin. Immunostaining with phospho-specific antibodies in mammalian cells reveals mitotic phosphorylation at Thr3 of H3 in prophase and its dephosphorylation during anaphase (11).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.