

Rabbit Histone H3K4me1 Polyclonal Antibody | anti-H3K4me1 antibody

Histone H3K4me1 antibody (pAb)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA60085	Rabbit	Wide Range Predicted	Western Blot, Chromatin Immunoprecipitation, Immunoprecipitation, Chromatin Immunoprecipitation, Immunoprecipitation

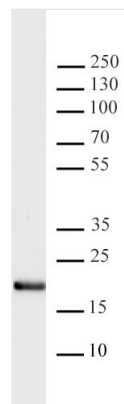
PRODUCT SYNONYMS

Histone H3K4me1; Polyclonal Antibody; Histone H3K4me1 antibody (pAb); anti-H3K4me1 antibody

PRODUCT SPECIFICATIONS

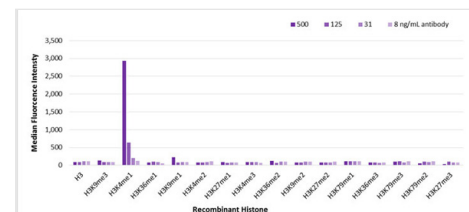
Host	Rabbit
Reactivity	Wide Range Predicted
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	Protein A Chromatography
Form/Format	Purified IgG in PBS containing 30% glycerol and 0.035% sodium azide.
Concentration	1ug/ul (varies by lot)
Applicable Applications for anti-H3K4me1 antibody	WB (Western Blot), ChIP (Chromatin immunoprecipitation), ChIP (Chromatin immunoprecipitation)
Immunogen	This antibody was raised against a peptide containing monomethyl-lysine 4 of Histone H3.
Preparation and Storage	Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20 degree C for up to 2 years. Keep all reagents on ice when not in storage.1ug/ul

IMAGES



WB (Western Blot)

Histone H3K4me1 antibody (pAb) tested by Western blot. 20 ug of HeLa cell nuclear extract was run on SDS-PAGE and probed with Histone H3K4me1 antibody at 0.5 ug/ml.



ChIP (Chromatin Immunoprecipitation)

Histone H3K4me1 antibody (pAb) tested by ChIP-Seq Chromatin immunoprecipitation (ChIP) was performed using the ChIP-IT High Sensitivity Kit with 15 ug of HeLa cell chromatin and 5 ug of antibody. ChIP DNA was sequenced on the Illumina NextSeq and 14.1 million sequence tags were mapped to identify Histone H3K4me1 binding sites on chromosome 1. Histone H3K4me1 antibody is a Protein A purified format generated from our serum format of same antibody) tested by Luminex bead-based specificity analysis. Various recombinant Histone proteins were conjugated to Luminex beads and incubated with varying dilutions of Histone H3K4me1 antibody. Bound antibody was detected with anti-rabbit IgG-PE and read in a MagPix Luminex Instrument. Luminex is a registered trademark of Luminex Corporation.

ADDITIONAL INFORMATION

Related Product Information for anti-H3K4me1 antibody	Short Description: Our Histone H3K4me1 antibody (pAb) was raised in a Rabbit host. It has been validated for use in Chromatin Immunoprecipitation, ChIP-Seq and Western blot; it is predicted that it will react with a wide range of sample types. Background: 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). Histone H1 is a linker histone, present at the interface between the nucleosome core and DNA entry/exit points. Histone H1 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; these modifications play a major role in regulating gene expression. The methylation of histones can occur on two different residues: arginine or lysine. Histone methylation can be associated with transcriptional activation or repression, depending on the methylated residue. Lysine 4 of histone H3 can be mono-, di- or trimethylated by different histone methyltransferases (HMTs) such as SET1 or ASH1. Methylation of Lys4 is often associated with transcriptional activation.
Product Categories/Family for anti-H3K4me1 antibody	Primary Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	4504281
NCBI GeneID	8350
NCBI Accession #	NP_003520.1
NCBI GenBank Nucleotide #	NM_003529.2
UniProt Accession #	P68431; P02295; P02296; P16106; Q6ISV8; Q6NWP8; Q6NWP9; Q6NXU4; Q71DJ3; Q93081; A0PJT7; A5PLR1
Molecular Weight	15,404 Da
NCBI Official Full Name	histone H3.1
NCBI Official Synonym Full Names	histone cluster 1, H3a
NCBI Official Symbol	HIST1H3A
NCBI Official Synonym Symbols	H3/A; H3FA
NCBI Protein Information	histone H3.1; histone H3/a; histone 1, H3a; H3 histone family, member A
UniProt Protein Name	Histone H3.1
UniProt Gene Name	HIST1H3A
UniProt Synonym Gene Names	H3FA
UniProt Entry Name	H31_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.