

Rabbit anti-Human Tri-Methyl-Histone H3 Polyclonal Antibody | anti-HIST1H3F antibody

Tri-Methyl-Histone H3 (Lys4) antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA50473	Rabbit	Human	Western Blot, Immunofluorescence, Chromatin Immunoprecipitation, Immunoprecipitation

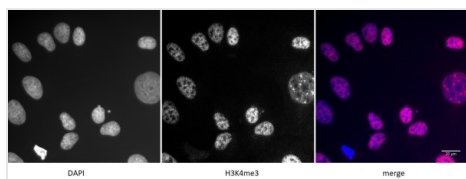
PRODUCT SYNONYMS

Tri-Methyl-Histone H3; Polyclonal Antibody; Tri-Methyl-Histone H3 (Lys4) antibody; RABBIT ANTI TRI-METHYL-HISTONE H3 (Lys4); anti-HIST1H3F antibody

PRODUCT SPECIFICATIONS

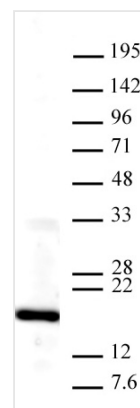
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	Antiserum to tri-methyl-histone H3 (Lys4) was raised by repeated immunization of rabbits with highly purified antigen. Purified IgG was prepared from whole serum by affinity chromatography on Protein A.
Form/Format	Purified IgG - liquid Phosphate buffered saline 0.035% Sodium Azide (NaN ₃), 30% Glycerol
Applicable Applications for anti-HIST1H3F antibody	WB (Western Blot), IF (Immunofluorescence), ChIP (Chromatin immunoprecipitation)
Immunogen	A peptide including tri-methylated lysine 4 of histone H3
Preparation and Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20 degree C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8 degree C for short term use (up to 4 weeks) and store the remaining aliquots at -20 degree C. Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. Should this product contain a precipitate we recommend microcentrifugation before use.

IMAGES



IF (Immunofluorescence)

Immunofluorescence staining of U2OS cells probed with tri-methyl-histone H3 (Lys4) antibody (AAA50473) at a 1/500 dilution (middle) and DAPI (left). Right panel shows merged images.



WB (Western Blot)

Western blot analysis of HeLa cell nuclear extract (20 ug) probed with tri-methyl-histone H3 (Lys4) antibody (AAA50473) at a 2 ug/ml dilution.

ADDITIONAL INFORMATION

Related Product Information for anti-HIST1H3F antibody	Rabbit anti Human tri-methyl-histone H3 (Lys4) antibody recognizes histone H3 when tri-methylated at lysine 4. Histone H3 is one of the four core histones that make up the nucleosome core particle. Histone H3 is one of the four core histones that make up the nucleosome core particle. Nucleosomes are the smallest subunit of chromatin and are made up of 146 bp of DNA wrapped around an octamer comprised of pairs of the four core histones (H2A, H2B, H3, and H4) (Smith, 1991). Histones can be mono-, di- or tri-methylated by histone methyltransferases. Depending on which amino acid residues are methylated, methylation of histones may increase or decrease the transcription of genes. Methylation events that weaken the binding between histone tails and DNA lead to increased transcription because they make the DNA more accessible to transcription factor proteins and RNA polymerase. Methylation of histones is therefore crucial for the regulation of gene expression (Gupta et al. 2010). Lysine 4 of histone H3 may be mono-, di- or tri-methylated by various histone methyltransferases (HMTs), including SET1 and ASH1. Histone H3 may also be demethylated at Lysine 4 by the demethylase LSD1. Tri-methylation of histone H3 at lysine 4 usually leads to transcriptional activation (Strahl et al. 1999). Wide species cross-reactivity is expected from Rabbit anti Human tri-methyl-histone H3 (Lys4) antibody based on sequence.
--	---

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.