

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

Di-Methyl-Histone H3 (Lys4) antibody

| CATALOG # | HOST   | REACTIVITY | APPLICATIONS                                                                                                   |
|-----------|--------|------------|----------------------------------------------------------------------------------------------------------------|
| AAA50449  | Rabbit | Human      | Western Blot, Immunofluorescence, Immunoblot, Western Blot, Chromatin Immunoprecipitation, Immunoprecipitation |

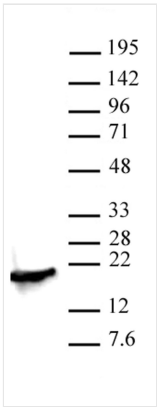
### PRODUCT SYNONYMS

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

### PRODUCT SPECIFICATIONS

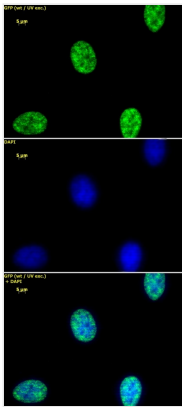
|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                               | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Reactivity                                         | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Clonality                                          | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Isotype                                            | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Purity/Purification                                | Antiserum to di-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<br>Phosphate buffered saline<br>0.035% Sodium Azide (NaN <sub>3</sub> ), 30% Glycerol                                                                                                                                                                                                                                                                                                                                                                                          |
| Applicable Applications for anti-HIST1H3F antibody | WB (Western Blot), IF (Immunofluorescence), IB (Immunoblot), ChIP (Chromatin immunoprecipitation)                                                                                                                                                                                                                                                                                                                                                                                                    |
| Species Cross-Reactivity                           | Mouse:Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Immunogen                                          | A peptide including di-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.<br>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



WB (Western Blot)

Western blot analysis of HeLa cell nuclear extract (20 ug) probed with di-methyl-histone H3 (Lys4) antibody (AAA50449) at a 1 ug/ml dilution.



IF (Immunofluorescence)

Immunofluorescence staining of HeLa cells probed with di-methyl-histone H3 (Lys4) antibody (AAA50449) at a 2 ug/ml dilution (top) and DAPI (middle). Bottom panel shows merged images.

ADDITIONAL INFORMATION

Related Product Information for anti-HIST1H3F antibody

Rabbit anti Human di-methyl-histone H3 (Lys4) antibody recognizes histone H3 when di-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). Di-methylation of histone H3 at lysine 4 usually leads to transcriptional activation. Wide species cross-reactivity is expected from Rabbit anti Human di-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                                                                                           |

**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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/di-methyl-histone-h3-antibody-western-blot-immunofluorescence-immunoblot-chromatin-immunoprecipitation-elisa/50449>