

Histone H3K9me2S10ph / H3K27me2S28ph antibody (mAb)

Catalog Nos: 61429, 61430

RRID: AB_2793632

Clone: 51Ta2H12

Isotype: IgG1k

Application(s): DB, ICC, IF, IP, WB

Reactivity: Human, Wide Range Predicted

Quantities: 100 µg, 10 µg

Purification: Protein G Chromatography

Host: Mouse

Concentration: 0.43 µg/µl

Molecular Weight: 17 kDa

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.

Histone H3 tails can be dimethylated on lysine (Kme2) and also phosphorylated on the adjacent serine (Sph) residue. H3K9me2S10ph and/or H3K28S29ph have been observed to occur during mitosis and may provide a specific chromatin conformation during chromatin condensation for cell division.

Immunogen: This antibody was raised against a synthetic peptide corresponding to amino acid residues 180-195 of human TAF10. The antibody recognizes H3 doubly modified at K9me2S10ph and/or K27me2S28ph.

Buffer: Purified IgG in 100mM Tris-HCl (pH 8.0), 150 mM NaCl, 0.1 mM EDTA, 45 mM glycine, 0.05% sodium azide

Application Notes:

Published Applications:

IP

ICC/IF

WB

DB

ELISA

See references for more information. Individual optimization may be required.

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Upon receipt, unconjugated antibodies may be stored at -20°C for up to 2 years. Fluorophore- & enzyme-conjugated antibodies should be stored at 4°C. Fluorophore-conjugated antibodies should be protected from light. Keep reagents on ice when not in storage; to avoid repeated freeze/thaw cycles, we recommend aliquoting items that will be stored frozen into single-use fractions prior to freezing. This product is guaranteed for 6 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.