

## Histone H3.3S31ph antibody (mAb)

**Catalog Nos:** 61671, 61672

**RRID:** AB\_2793728

**Clone:** 1A8G10

**Isotype:** IgG2b

**Application(s):** ICC, IF, WB

**Reactivity:** Human, Wide Range Predicted

**Quantities:** 100 µg, 10 µg

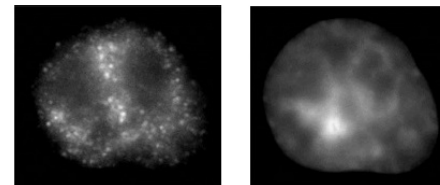
**Purification:** Protein G Chromatography

**Host:** Mouse

**Concentration:** 1 µg/µl

**Molecular Weight:** 17 kDa

**Background:** Histone H3.3 (H3F3) is a variant of histone H3 that contains a serine (S) to alanine (A) replacement at amino acid position 31. This variant Histone H3.3 has been found to replace conventional histone H3 in nucleosomes of active genes. Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. Histone variants differ in amino acid sequence from their core histone counterparts and in some cases have also been shown to have functional differences to the more typical histones. Histone variant H3.3 is the predominant form of histone H3 in non-dividing cells. Phosphorylation of serine 31 of histone variant H3.3 is specific to regions bordering centromeres in metaphase chromosomes.



**Histone H3.3S31ph antibody (mAb) (Clone 1A8G10) tested by immunofluorescence.**  
Left: HeLa cell stained with H3.3S31ph antibody (mAb). Right: Hoechst.

**Immunogen:** This antibody was raised against a synthetic peptide including phosphoserine 31 of human histone H3.3.

**Buffer:** Purified IgG in PBS with 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

### Application Notes:

Validated Applications:

ICC/IF: 5 µg/ml dilution

WB: 0.5 - 2 µl/ml dilution

**Storage and Guarantee:** 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°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

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



**Histone H3.3S31ph antibody (mAb) (Clone 1A8G10) tested by Western blot.**

Detection of Histone H3.3S31ph antibody by Western blot. The analysis was performed using 20 µg of untreated (lane 1) or cocemid treated (lane 2) HeLa nuclear extract with Histone H3.3S31ph antibody at a 1 µg/ml dilution.