Monoclonal Antibody
Catalog No. CEC-012

For research use only.
Not for use in diagnostic procedures.

Anti-Histone H3.3 S31 antibody

Clone	Cross reactivity	Application notes	Host	Isotype	Storage
1A8G10	Mammals	WB, ICC, ChIP	Mouse	IgG2b, κ	-20°C

BACKGROUND : Nucleosomes are composed of four different histone proteins, designated H3, H4, H2A, and H2B. Histone H3 has two main variants, H3.1 and H3.3, which show different genomic localization patterns in eukaryotes. Histone H3.3 serves as the replacement variant for the DNA-synthesis-independent deposition pathway.
Post-translation modifications of histones modulate the accessibility and transcriptional competence of specific chromatin regions within the eukaryotic genome. Phosphorylation of histone H3 is unique in the sense that it associates on one hand with open chromatin during gene activation and marks on the other hand highly condensed chromatin during mitosis.

Immunogen Synthetic peptide corresponding to N-terminus region Ser31ph (aa 24-37) of human Histone H3.3, AARKSAP(phS)TGGVKK

Host Mouse
Isotype IgG2b, κ
Cross reactivity Mammals

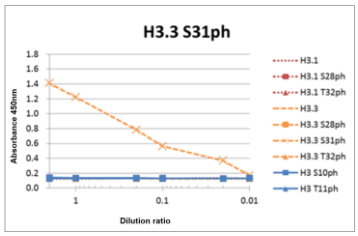
Specificity Histone H3.3 S31ph
Application notes Recommended use
ELISA, WB, ICC, ChIP
Recommended dilutions
Western blotting, 1/1000 to 1/5000
Immunocytochemistry, 1/100 to 1/500

Optional dilutions/concentrations should be determined by the end user.

Source Culture Supernatant
Purification Ion-exchange chromatography
Form Liquid
Presentation Purified monoclonal antibody in PBS, 50% Glycerol, 0.05%w/v ProClin300
Concentration 1 mg/mL
Volume 100 μL
Storage Store below -20°C
(below -70°C for prolonged storage)
Aliquot to avoid cycles of freeze/thaw.

References 1) Yoshimi et al., (2013) Monoclon Antib Immunodiagn Immunother, 32, 119-124
This antibody is used in ref.1.

Data

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H3.1          21 ATKAARKS  APAT  GGVKKPH   39
H3.1 S28ph    21 ATKAARKSphAPAT  GGVKKPH   39
H3.1 T32ph    21 ATKAARKS  APATphGGVKKPH   39
H3.3          21 ATKAARKS  APST  GGVKKPH   39
H3.3 S28ph    21 ATKAARKSphAPST  GGVKKPH   39
H3.3 S31ph    24    AARKS  APSphTGGVKK     37
H3.3 T32ph    21 ATKAARKS  APSTphGGVKKPH   39
H3 S10ph       1    ARTKQTARKSphTGGKAPRKQ  19
H3 T11ph       1    ARTKQTARKSTphGGKAPRKQ  19
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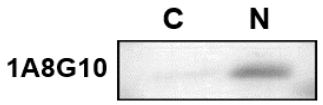
Fig.1 ELISA analysis
- Histone H3.3 S31ph antibody (1A8G10)



C; asynchronous glowing HeLa cell extracts
N; nocodazole-treated HeLa cell extracts

Fig.2 Western blot
- Histone H3.3 S31ph antibody (1A8G10)
the treated-cell extracts

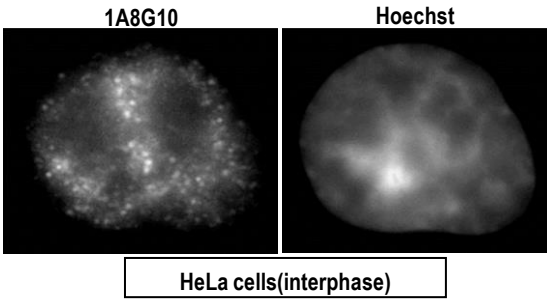


Fig.3 Immunocytochemistry/Immunofluorescence
- Histone H3.3 S31ph antibody (1A8G10)
HeLa cells

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