



## MONOCLONAL ANTIBODY

For research use only. Not for clinical diagnosis

**Catalog No. CEC-006**

### Anti- Histone H3.1/H3.2 [ Clone : 1D4F2 ]

#### 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. Deposition of Histone H3.1 is coupled to DNA synthesis during DNA replication and possibly DNA repair.

<b>Product type</b>	Primary antibody
<b>Immunogen</b>	Synthetic peptide corresponding to N-terminus region (aa 21-39) of human Histone H3.1, ATKAARKSAPATGGVKKPH
<b>Host</b>	Mouse
<b>Clone number</b>	1D4F2
<b>Isotype</b>	IgG2b, $\kappa$
<b>Source</b>	Culture supernatant
<b>Purification</b>	Ion-exchange chromatography
<b>Form</b>	Liquid
<b>Presentation</b>	Purified monoclonal antibody in PBS, 50% Glycerol, 0.05%w/v ProClin300
<b>Concentration</b>	1 mg/mL
<b>Volume</b>	50 $\mu$ L
<b>Label</b>	Unlabeled
<b>Specificity</b>	Histone H3.1/3.2, Epitope <b>Histone H3.1/3.2 (21-39)</b> * Human(HeLa), Monkey(COS1), Mouse(NIH3T3), Rat(NRK), Dog(MDCK)
<b>Cross reactivity</b>	Human, Monkey, Mouse, Rat, Hamster Other species have not been tested.
<b>Storage</b>	Store below -20°C (below -70°C for prolonged storage) Aliquot to avoid cycles of freeze/thaw.
<b>Other</b>	<b>Data Link:</b> UniProtKB/Swiss-Prot <a href="#">P68431</a>

#### Application notes

##### Recommended use

WB, ICC, IHC, ChIP, IP Not tested for other applications.

##### Recommended dilutions

Western blotting, 1/1,000 to 1/5,000

Immunocytochemistry, 1/100 to 1/500

Immunohistochemistry, 1/100 to 1/500

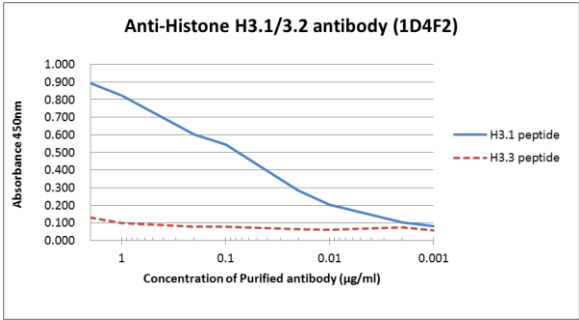
Optimal dilutions/concentrations should be determined by the end user.

#### References

- 1) Hake and Allis, (2006) PNAS, 103, 6428-6435. [PMID:16571659](#)
- 2) Harada et al., (2012) EMBO J. doi: 10.1038/emboj.2012.136. [PMID:22569126](#)

\* This antibody is used in ref.2.

ANTIBODY CHARACTERIZATION



H3.1 peptide 21    ATKAARKSAP**A**TGGVKKPH    39  
H3.3 peptide 21    ATKAARKSAP**S**TGGVKKPH    39

Fig.1 The composition of Histone H3 variants peptides and the reactivity using Histone H3.1/H3.2 antibody, 1D4F2.

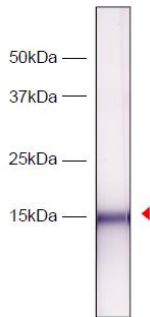


Fig.2 Western blot analysis of HeLa cell extracts using Histone H3.1/H3.2 antibody, 1D4F2.

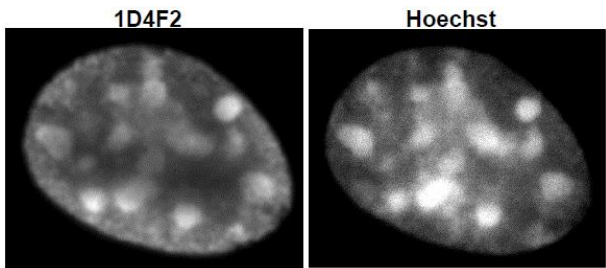


Fig.3 Immunocytochemical analysis of HeLa Cell using Histone H3.1/H3.2 antibody, 1D4F2.

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