



**MONOCLONAL ANTIBODY**

*For research use only. Not for clinical diagnosis*

**Catalog No. CEC-005**

**Anti- Histone H3.1/H3.2 [ Clone : 6G3C7 ]**

**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.

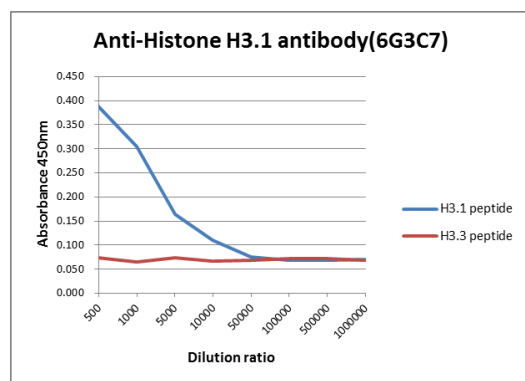
<b>Product type</b>	Primary antibody
<b>Immunogen</b>	Synthetic peptide corresponding to core region (aa 79-97) of human H3.1, KTDLRFQSSAVMALQEASE
<b>Host</b>	Rat
<b>Clone number</b>	6G3C7
<b>Isotype</b>	IgG1, $\lambda$
<b>Source</b>	Culture supernatant
<b>Purification</b>	Ion-exchange chromatography
<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>	100 $\mu$ L
<b>Label</b>	Unlabeled
<b>Specificity</b>	Histone H3.1/3.2, Epitope: <b>Histone H3.1/3.2(79-94)</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>

<b>Application notes</b>	<b>Recommended use</b> WB      Not tested for other applications.
	<b>Recommended dilutions</b> Western blotting, 1/10000 (Fig.2) Optimal dilutions/concentrations should be determined by the end user.

<b>References</b>	1) Hake and Allis, (2006) PNAS, 103, 6428-6435 2) Harada et al., (2012) EMBO J. doi: 10.1038/emboj.2012.136.
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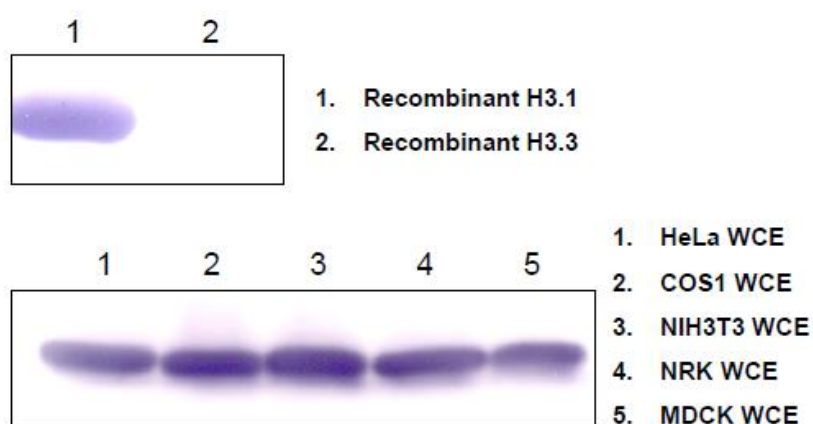
\* This antibody is used in ref.2.

## ANTIBODY CHARACTERIZATION



H3.1 peptide 79 KTDLRFS**S**AVMALQEASEA 97  
H3.3 peptide 79 KTDLRFS**A**IGALQEASEA 97

**Fig.1 The composition of Histone H3 variants peptides and the reactivity using Histone H3.1 antibody, 6G3C7.**



**Fig.2 Western blot analysis of recombinant protein and mammalian cell extracts using Histone H3.1 antibody, 6G3C7.**

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