



MONOCLONAL ANTIBODY

For research use only. Not for clinical diagnosis

Catalog No. CEC-008

Anti- Histone H3.3 [Clone : 4H2D7]

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.

Product type	Primary antibody
Immunogen	Synthetic peptide corresponding to N-terminus region (aa 21-39) of human Histone H3.3, ATKAAR(acK)SAPSTGGVKKPH
Host	Rat
Clone number	4H2D7
Isotype	IgG2a, κ
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	50 μ L
Label	Unlabeled
Specificity	Histone H3.3, Epitope : Histone H3.3 (21-39) * Human(HeLa), monkey(COS1), mouse(NIH3T3)
Cross reactivity	Human, Monkey, Mouse, Rat, Hamster Other species have not been tested.
Storage	Store below -20°C (below -70°C for prolonged storage) Aliquot to avoid cycles of freeze/thaw.
Other	Data Link: UniProtKB/Swiss-Prot P84243

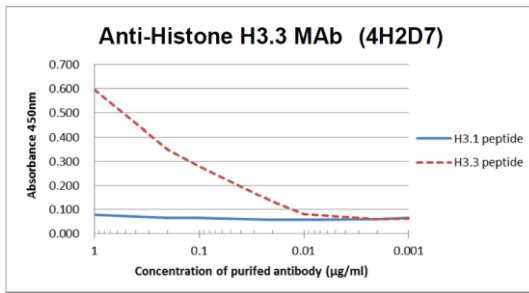
Application notes	Recommended use WB, ICC, IHC, ChIP, IP Not tested for other applications.
	Recommended dilutions Western blotting, 1/1,000 to 1/5,000 Immunocytochemistry, 1/500 Immunohistochemistry, 1/100 to 1/500

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

References	1) Hake SB, <i>et al.</i> , Proc Natl Acad Sci U S A. 2006 Apr 25;103(17):6428-35. PMID: 16571659 2) Harada, <i>et al.</i> , EMBO J. 2012 Jun 29;31(13):2994-3007. PMID: 22569126
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* This antibody is used in ref.2.

ANTIBODY CHARACTERIZATION



H3.1 peptide 21 ATKAARKSAPATGGVKKPH 39
 H3.3 peptide 21 ATKAARKSAPSTGGVKKPH 39

Fig.1 The composition of Histone H3 variants peptides and the reactivity using Histone H3.3 antibody, 4H2D7.

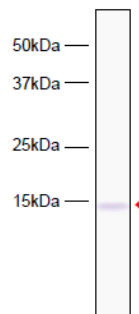


Fig.2 Western blot analysis of HeLa cell extracts using Histone H3.3 antibody, 4H2D7.

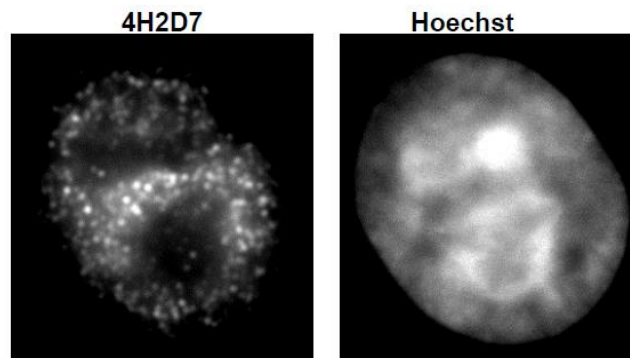


Fig.3 Immunocytochemical analysis of HeLa Cell using Histone H3.3 antibody, 4H2D7.

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