



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
Rased in	Rat
Myeloma	SP2
Clone number	4H2D7
Isotype	IgG2a, κ
Host	-
Source	Culture supernatant
Purification	Ion-exchange chromatography
Form	Liquid
Storage buffer	PBS containing 50% Glycerol, 0.05% NaN ₃ as a preservative
Concentration	1 mg / ml
Volume	50 ul
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

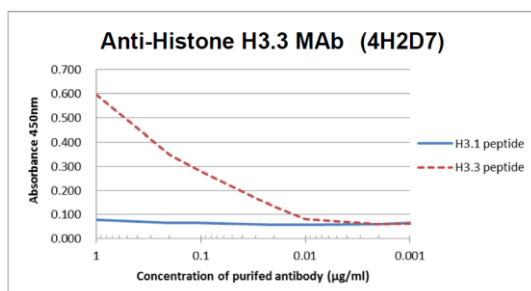
Application notes	• Western blotting: 1/1000 – 1/5000
Recommended dilutions	• Immunocytochemistry: 1/500
	• Immunohistochemistry: 1/100 – 1/500
	• ChIP
	• IP

Other applications have not been tested.
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

* 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 of Histone H3.3 antibody (4H2D7).

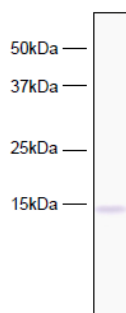


Fig.2 Western blot analysis of HeLa cell extracts using Histone H3.3 antibody (4H2D7).

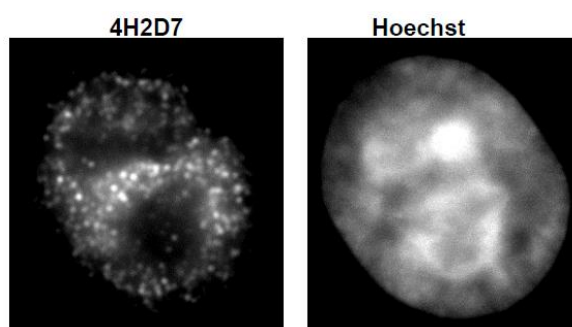


Fig.3 Immunocytochemical analysis of HeLa Cell using Histone H3.3 antibody (4H2D7).

RELATED PRODUCTS:

Product Name	Clone	Application	Maker	Cat#
Anti Histone H3.1/3.2 (Variant) Monoclonal Antibody	6G3C7	WB	CAC	CE-039A
Anti Histone H3.1/3.2 (Variant) Monoclonal Antibody	1D4F2	ChIP/ WB/ IC/ IHC/ IP	CAC	CE-039B
Anti Histone H3.3 (Variant) Monoclonal Antibody	6C4A3	WB	CAC	CE-040A
Anti Histone H3.3 (Variant) Monoclonal Antibody	4H2D7	ChIP/ WB/ IC/ IHC/ IP	CAC	CE-040B
Anti Histone H3 S10ph Monoclonal Antibody	6G8B7	WB/ IC	CAC	CE-034A
Anti Histone H3 T11ph Monoclonal Antibody	6G12C5	WB/ IC	CAC	CE-035A
Anti Histone H3 T32ph Monoclonal Antibody	6C7G12	WB/ IC	CAC	CE-036A
Anti Histone H3 K9Ac Monoclonal Antibody	2G1F9	WB/ IC	CAC	CE-037A
Anti RNA polymerase 2, CTD Ser2ph Monoclonal Antibody	3E7C7	ChIP/ WB/ IC	CAC	CE-030A
Anti RNA polymerase 2, CTD Ser5ph Monoclonal Antibody	1H4B6	ChIP/ WB/ IC	CAC	CE-031A

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