



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.

Product type	Primary antibody
Immunogen	Synthetic peptide corresponding to N-terminus region (aa 21-39) of human Histone H3.1, ATKAARKSAPATGGVKKPH
Host	Mouse
Clone number	1D4F2
Isotype	IgG2b, 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 H3.1/3.2, Epitope Histone H3.1/3.2 (21-39) * Human(HeLa), Monkey(COS1), Mouse(NIH3T3), Rat(NRK), Dog(MDCK)
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 P68431

Application notes **Recommended use**
WB, ICC, IHC, ChIP, IP Not tested for other applications.

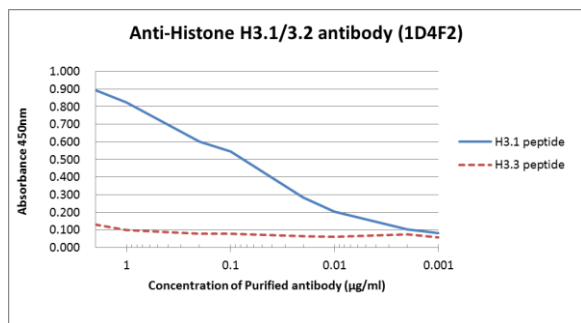
Recommended dilutions
Western blotting, 1/1,000 to 1/5,000
Immunocytochemistry, 1/100 to 1/500
Immunohistochemistry, 1/100 to 1/500

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.

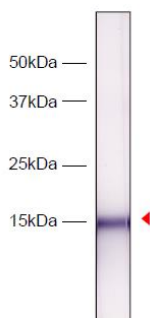


Fig.2 Western blot analysis of HeLa cell extracts using Histone H3.1/H3.2 antibody, 1D4F2.

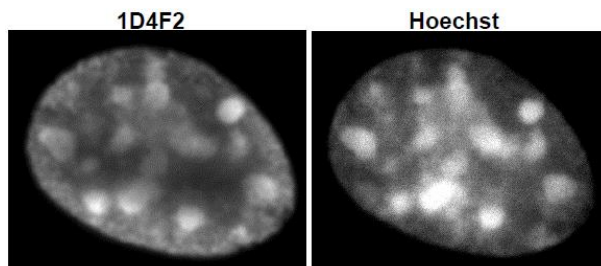


Fig.3 Immunocytochemical analysis of HeLa Cell using Histone H3.1/H3.2 antibody, 1D4F2.

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COSMO BIO Co., LTD.

【JAPAN】

TOYO EKIMAE BLDG. 2-20, TOYO 2-CHOME,
 KOTO-KU. TOKYO 135-0016, JAPAN
 Phone: +81-3-5632-9610
 FAX: +81-3-5632-9619
 URL: <https://www.cosmobio.co.jp/>



COSMO BIO USA

【Outside Japan】

2792 Loker Ave West, Suite 101
 Carlsbad, CA 92010, USA
 email: info@cosmobiousa.com
 Phone/FAX: (+1) 760-431-4600
 URL: www.cosmobiousa.com