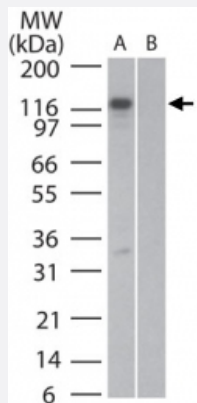


Dnmt3a monoclonal antibody, clone 64B1446

Catalog # MAB0080

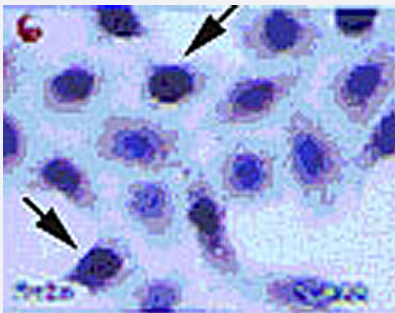
Size 100 ug

Applications



Western Blot (Transfected lysate)

Western blot analysis of Dnmt3a in (A) Dnmt3a transfected 293 cell lysate and (B) untransfected 293 cell lysate. Using Dnmt3a monoclonal antibody, clone 64B1446 (Cat # MAB0080) at 1 ug/mL .



Immunocytochemistry

Immuno-staining of Dnmt3a. Using Dnmt3a monoclonal antibody, clone 64B1446 (Cat # MAB0080) at 5 ug/mL dilution on cultured HeLa cells. The nucleic staining is shown in most of the cells.

Specification

Product Description	Mouse monoclonal antibody raised against full length recombinant Dnmt3a.
Immunogen	Recombinant His fusion protein corresponding to full length mouse Dnmt3a.
Host	Mouse
Reactivity	Human, Mouse
Form	Liquid
Isotype	IgG1

Recommend Usage	The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.05% BSA, 0.05% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- **ChIP**

- **Western Blot (Transfected lysate)**

Western blot analysis of Dnmt3a in (A) Dnmt3a transfected 293 cell lysate and (B) untransfected 293 cell lysate. Using Dnmt3a monoclonal antibody, clone 64B1446 (Cat # MAB0080) at 1 ug/mL .

- **Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)**

- **Immunocytochemistry**

Immuno-staining of Dnmt3a. Using Dnmt3a monoclonal antibody, clone 64B1446 (Cat # MAB0080) at 5 ug/mL dilution on cultured HeLa cells. The nucleic staining is shown in most of the cells.

- **Immunofluorescence**

Gene Info — Dnmt3a

Entrez GeneID	13435
Gene Name	Dnmt3a
Gene Alias	AU015806, W91664
Gene Description	DNA methyltransferase 3A
Gene Ontology	Hyperlink
Other Designations	-

Publication Reference

- [SALL3 expression balance underlies lineage biases in human induced pluripotent stem cell differentiation.](#)

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Application: WB-Ce, Human, 253G1 cells

- [Methylation of LOXL1 promoter by DNMT3A in aged human skin fibroblasts.](#)

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Application: IP, Human, Dermal fibroblasts

- [Arsenic induces functional re-expression of estrogen receptor \$\alpha\$ by demethylation of DNA in estrogen receptor-negative human breast cancer.](#)

Du J, Zhou N, Liu H, Jiang F, Wang Y, Hu C, Qi H, Zhong C, Wang X, Li Z.

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Application: WB-Ce, Human, MCF-7, MDA-MB-231 cells

- [Multiplex rt-PCR expression analysis of developmentally important genes in individual mouse preimplantation embryos and blastomeres.](#)

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- [Maternal and zygotic Dnmt1 are necessary and sufficient for the maintenance of DNA methylation imprints during preimplantation development.](#)

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- [Helicobacter pylori regulates p21\(WAF1\) by histone H4 acetylation.](#)

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- [Coordinate regulation of DNA methyltransferase expression during oogenesis.](#)

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- [Aberrant epigenetic modifications in hepatocarcinogenesis induced by hepatitis B virus X protein.](#)

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Gastroenterology 2007 Apr; 132(4):1476.

Application: WB-Tr, Human, CHL cells

- [Dnmt3a2 targets endogenous Dnmt3L to ES cell chromatin and induces regional DNA methylation.](#)

Nimura K, Ishida C, Koriyama H, Hata K, Yamanaka S, Li E, Ura K, Kaneda Y.

Genes to Cells 2006 Oct; 11(10):1225.

Application: WB, Human, Wild-type, Dnmt3a/Dnmt3b double mutant Dnmt3L-null ES cells

- [Maintenance of self-renewal ability of mouse embryonic stem cells in the absence of DNA methyltransferases Dnmt1, Dnmt3a and Dnmt3b.](#)

Akiko Tsumura, Tomohiro Hayakawa, Yuichi Kumaki, Shin-ichiro Takebayashi, Morito Sakaue, Chisa Matsuoka, Kunitada Shimotohno, Fuyuki Ishikawa, En Li, Hiroki R Ueda, Jun-ichi Nakayama, Masaki Okano.

Genes to Cells 2006 Jul; 11(7):805.

- [Dimethyl sulfoxide has an impact on epigenetic profile in mouse embryoid body.](#)

Misa Iwatani, Kohta Ikegami, Yuliya Kremenska, Naka Hattori, Satoshi Tanaka, Shintaro Yagi, Kunio Shiota.

Stem Cells 2006 Nov; 24(11):2549.

Application: WB-Ce, Mouse, Mouse embryonic stem cells

- [Stage-specific induction of DNA methyltransferases in olfactory receptor neuron development.](#)

Jessica L MacDonald, Christopher S Y Gin, A Jane Roskams.

Developmental Biology 2005 Dec; 288(2):461.

Application: IF, IHC, Mouse, Mouse olfactory epithelium, OP27 cells

- [Inhibition of DNA methyltransferase reverses cisplatin induced drug resistance in murine neuroblastoma cells.](#)

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Application: WB-Tr, Monkey, Mouse, COS-7 cells, Mouse embryonic stem cell lines J1

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Jian Feng, Hua Chang, En Li, Guoping Fan.

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Application: WB-Ce, Human, Mouse, Caco-2, HCT-116, NIH/3T3 cells

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Carmen Brenner, Rachel Deplus, Celine Didelot, Axelle Lorient, Emmanuelle Vire, Charles De Smet, Arantxa Gutierrez, Davide Danovi, David Bernard, Thierry Boon, Pier Giuseppe Pelicci, Bruno Amati, Tony Kouzarides, Yvan de Launoit, Luciano Di Croce, Francois Fuks.

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Application: ChIP, IP, WB-Ce, WB-Tr, Human, HEK 293, HeLa, U-2 OS cells

- [Loss of estrogen receptor signaling triggers epigenetic silencing of downstream targets in breast cancer.](#)

Yu-Wei Leu, Pearly S Yan, Meiyun Fan, Victor X Jin, Joseph C Liu, Edward M Curran, Wade V Welshons, Susan H Wei, Ramana V Davuluri, Christoph Plass, Kenneth P Nephew, Tim H-M Huang.

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Application: ChIP, Human, MCF-7 cells

- [Role of the DNA methyltransferase variant DNMT3b3 in DNA methylation.](#)

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- [Association of Lsh, a regulator of DNA methylation, with pericentromeric heterochromatin is dependent on intact heterochromatin.](#)

Qingsheng Yan, Edward Cho, Stephen Lockett, Kathrin Muegge.

Molecular and Cellular Biology 2003 Dec; 23(23):8416.

Application: WB-Ce, Mouse, NIH/3T3 cells

- [Establishment and maintenance of genomic methylation patterns in mouse embryonic stem cells by Dnmt3a and Dnmt3b.](#)

Taiping Chen, Yoshihide Ueda, Jonathan E Dodge, Zhenjuan Wang, En Li.

Molecular and Cellular Biology 2003 Aug; 23(16):5594.

Application: WB-Tr, Mouse, J1 cells

- [A novel Dnmt3a isoform produced from an alternative promoter localizes to euchromatin and its expression correlates with active de novo methylation.](#)

Taiping Chen, Yoshihide Ueda, Shaoping Xie, En Li.

The Journal of Biological Chemistry 2002 Oct; 277(41):38746.

Application: IP, WB-Ce, WB-Tr, Bacteria, Human, Monkey, Mouse, Bacterial cells, BT-549, COS-7, ES2, Hs578T, MCF-7, MDA-MB-231, MDA-MB-435, MDAH2774, NCCIT, NIH/3T3, OV1063, OVCA-3 cells

- [Lsh, a member of the SNF2 family, is required for genome-wide methylation.](#)

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