

## DATASHEET

# DNMT3A Rabbit Polyclonal Antibody

CAT. NO. ARA6820

### KEY FEATURES

Target	DNMT3A	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB, IHC	Storage	-20°C

### BACKGROUND

Methylation of DNA at cytosine residues plays an important role in regulation of gene expression, genomic imprinting and is essential for mammalian development. Hypermethylation of CpG islands in tumor suppressor genes or hypomethylation of bulk genomic DNA may be linked with development of cancer. To date, 3 families of mammalian DNA methyltransferase genes have been identified which include Dnmt1, Dnmt2 and Dnmt3. Dnmt1 is constitutively expressed in proliferating cells and inactivation of this gene causes global demethylation of genomic DNA and embryonic lethality. Dnmt2 is expressed at low levels in adult tissues and its inactivation does not affect DNA methylation or maintenance of methylation. The Dnmt3 family members, Dnmt3a and Dnmt3b, are strongly expressed in ES cells but their expression is down regulated in differentiating ES cells and is low in adult somatic tissue. Recently, it has been shown that naturally occurring mutations of Dnmt3b gene occurs in patients with a rare autosomal recessive disorder, termed ICF (immunodeficiency, centromeric instability, and facial anomalies) syndrome.

### APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:50 - 1:100

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

### PRODUCT OVERVIEW

Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human DNMT3A. The exact sequence is proprietary
Purification	The antibody was purified by immunogen affinity chromatography
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide
Gene Name	DNMT3A
Alternative Names	DNA (cytosine-5)-methyltransferase 3A; Dnmt3a; DNA methyltransferase HsallIA; DNA MTase HsallIA; M.HsallIA
Gene ID (Human)	1788
Gene ID (Mouse)	13435
Gene ID (Rat)	444984
Protein ID (Human)	Q9Y6K1
Protein ID (Mouse)	O88508
Protein ID (Rat)	Q1LZ53

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

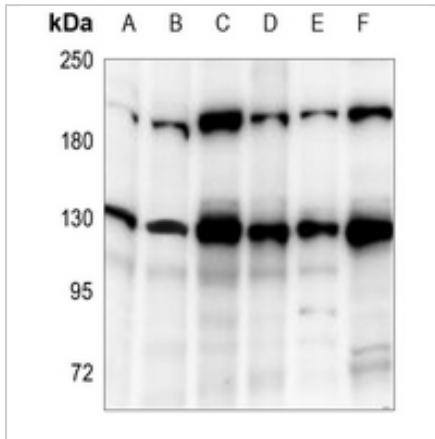
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

**DATASHEET**

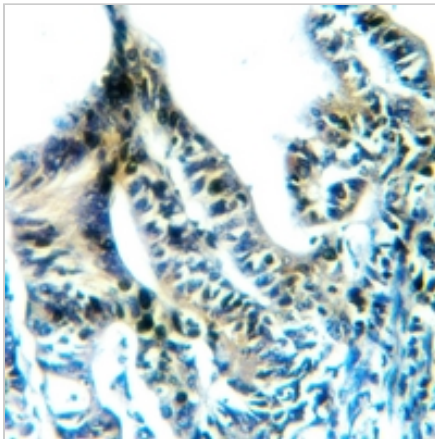
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**DATA**



Western blot analysis of DNMT3A expression in MEF (A), H9C2 (B), HCT116 (C), Jurkat (D), PC3 (E), HEK293T (F) whole cell lysates. (Predicted band size: 16; 81; 101 kD; Observed band size: 130 kD)



Immunohistochemical analysis of DNMT3A staining in human colorectal cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

**STORAGE**

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.

More information: [www.arexbio.com](http://www.arexbio.com)