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Anti-DNMT3A Antibody

Rabbit polyclonal antibody to DNMT3A
Catalog # AP60159

Product Information

Application	WB
Primary Accession	Q9Y6K1
Other Accession	O88508
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	101858

Additional Information

Gene ID	1788
Other Names	DNA (cytosine-5)-methyltransferase 3A; Dnmt3a; DNA methyltransferase HsaIIIA; DNA MTase HsaIIIA; M.HsaIIIA
Target/Specificity	Recognizes endogenous levels of DNMT3A protein.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

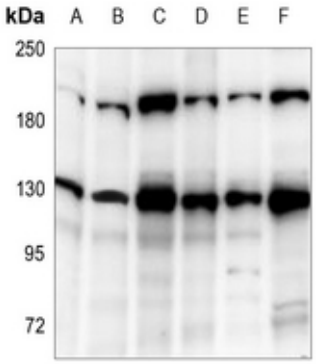
Name	DNMT3A
Function	Required for genome-wide de novo methylation and is essential for the establishment of DNA methylation patterns during development (PubMed:12138111, PubMed:16357870, PubMed:30478443). DNA methylation is coordinated with methylation of histones (PubMed:12138111, PubMed:16357870, PubMed:30478443). It modifies DNA in a non-processive manner and also methylates non-CpG sites (PubMed:12138111, PubMed:16357870, PubMed:30478443). May preferentially methylate DNA linker between 2 nucleosomal cores and is inhibited by histone H1 (By similarity). Plays a role in paternal and maternal imprinting (By similarity). Required for methylation of most imprinted loci in germ cells (By similarity). Acts as a transcriptional corepressor for ZBTB18 (By similarity). Recruited to trimethylated 'Lys-36' of histone H3 (H3K36me3) sites (By similarity). Can actively repress transcription through the recruitment of HDAC activity (By similarity). Also has weak auto-methylation activity on Cys-710 in absence of

	DNA (By similarity).
Cellular Location	Nucleus. Chromosome Cytoplasm. Note=Accumulates in the major satellite repeats at pericentric heterochromatin {ECO:0000250|UniProtKB:O88508}
Tissue Location	Highly expressed in fetal tissues, skeletal muscle, heart, peripheral blood mononuclear cells, kidney, and at lower levels in placenta, brain, liver, colon, spleen, small intestine and lung

Background

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human DNMT3A. The exact sequence is proprietary.

Images



Western blot analysis of DNMT3A expression in MEF (A), H9C2 (B), HCT116 (C), Jurkat (D), PC3 (E), HEK293T (F) whole cell lysates.