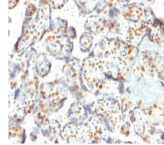


DNMT3A / DNA Methyltransferase 3 Alpha Monoclonal Mouse Antibody (PCRP-DNMT3A-1E2)



Product Description

The specificity of this monoclonal antibody to its intended target was validated by HuProt™Array, containing more than 19,000, full-length human proteins. DNMT3A is required for genome-wide de novo methylation and is essential for the establishment of DNA methylation patterns during development. DNA methylation is coordinated with methylation of histones. It modifies DNA in a non-processive manner and also methylates non-CpG sites. May preferentially methylate DNA linker between 2 nucleosomal cores and is inhibited by histone H1. Plays a role in paternal and maternal imprinting. Required for methylation of most imprinted loci in germ cells. Acts as a transcriptional corepressor for ZBTB18. Recruited to trimethylated 'Lys-36' of histone H3 (H3K36me3) sites. Can actively repress transcription through the recruitment of HDAC activity. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Product attributes

Antibody number	#1898
Antibody reactivity (target)	DNA Methyltransferase 3 Alpha, DNMT3A
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	PCRP-DNMT3A-1E2
Isotype	IgG1
Molecular weight	102 kDa
Synonyms	DNA methyltransferase 3 alpha; DNA methyltransferase HsaIIIA; DNAMTaseHsaIIIA; DNMT; DNMT3A2; M.HsaIIIA; MCMT; TBR5
Human gene symbol	DNMT3A
Entrez gene ID	1788
SwissProt	Q16655
Unigene	154069
Immunogen	Recombinant full-length human DNMT3A protein
Antibody target cellular localization	Nucleus
Verified antibody applications	IHC (FFPE) (verified)
Species reactivity	Human
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunohistochemistry (formalin): 1-2 ug/mL for 30 minutes at RT. Immunoprecipitation 2-4 ug/mg protein. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Tris with 1 mM EDTA pH 9.0 for 10-20 minutes followed by cooling at RT for 20 minutes. Western blotting 0.5-1.0 ug/mL. Optimal dilution for a specific application should be determined by user
Positive control	HeLa cells or Placenta
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C. Protect fluorescent conjugates from light. Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Validated in protein array	Monospecific
Antibody research areas	DNA methylation

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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