

# DNMT3A / DNA Methyltransferase 3 Alpha Antibody

Mouse Monoclonal Antibody [Clone PCRP-DNMT3A-1E2]

Catalog No	Format		Size
1788-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml		20 ug
1788-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml		100 ug
1788-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml		100 ug
Applications	Tested Dillution	Note	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT_Stain	ing of formalin-fixed tissues requires heating tissue

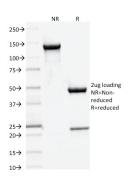
Immunohistochemistry (IHC)		30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

Drad	1	Details
PIOO	UCL	Details

Clone	PCRP-DNMT3A-1E2
Gene Name	DNMT3A
Immunogen	Recombinant human full-length DNMT3A protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	102kDa
Cellular Localization	Chromosome, Cytoplasm, Nucleus
Species Reactivity	Human
Positive Control	HeLa cells. Placenta.
Positive Control	

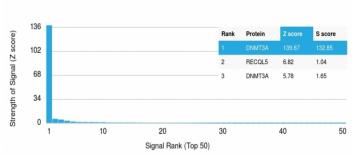
\*Optimal dilution for a specific application should be determined.

## Product Images for DNMT3A / DNA Methyltransferase 3 Alpha Antibody

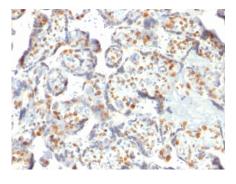


SDS-PAGE Analysis of Purified DNMT3A Mouse Moncolonal Antibody (PCRP-DNMT3A-1E2). Confirmation of Purity and Integrity of Antibody. Formalin-fixed, paraffin-embedded human Placenta stained with DNMT3A Mouse Monoclonal Antibody (PCRP-DNMT3A-1E2).





Analysis of Protein Array containing more than 19,000 full-length human proteinsusing DNMT3A Mouse Monoclonal Antibody (PCRP-DNMT3A-1E2) Z- and S- Score: The Z- score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibdy) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Formalin-fixed, paraffin-embedded human Placenta stained with DNMT3A Mouse Monoclonal Antibody (PCRP-DNMT3A-1E2).

### **Specificity & Comments**

The specificity of this monoclonal antibody to its intended target was validated by HuProtTM Array, containing more than 19,000, fulllength 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. Sadenosyl-L-methionin

#### Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

#### Storage and Stability

Antibody with azide - store at 2 to  $8^{\circ}$ C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

#### **Research Areas**

Cancer, Epigenetics, Hypoxia, Immuno Oncology, Infectious Disease, Nuclear Marker, Transcription Factors

#### **Limitations and Warranty**

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

