

For Research Use Only

# DNMT3A Recombinant antibody, PBS Only

Catalog Number: 81474-6-PBS



## Basic Information

<b>Catalog Number:</b> 81474-6-PBS	<b>GenBank Accession Number:</b> BC043617	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1788	<b>CloneNo.:</b> 242257A9
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q9Y6K1	
<b>Isotype:</b> IgG	<b>Full Name:</b> DNA (cytosine-5-)-methyltransferase 3 alpha	
<b>Immunogen Catalog Number:</b> AG15111	<b>Calculated MW:</b> 912 aa, 102 kDa	

## Applications

**Tested Applications:**  
IF/ICC, FC (Intra), Indirect ELISA

**Species Specificity:**  
human

## Background Information

DNA methylation in vertebrate animals is an epigenetic modification that is important for embryonic development, imprinting, and the inactivation of X chromosomes. DNA methylation is catalyzed by a family of DNA methyltransferases (DNMTs) that include the maintenance enzyme DNMT1 and de novo methyltransferases DNMT3a and DNMT3b. The overexpression of DNMT1, DNMT3a, and DNMT3b has been reported in various malignancies, including gastric, urothelial, and lung cancers, and may be related to tumorigenesis, tumor progression, and poor survival. Two isoforms of DNMT3a exist: the full-length DNMT3a, and the shorter form DNMT3a2 which lacks the N-terminal fragment. DNMT3a is expressed ubiquitously at low levels, while DNMT3a2 is specially expressed at high levels in embryonic stem cells and shows restricted expression in tissues known to undergo de novo methylation including testis and ovary. This antibody was raised against the N-terminal region of human DNMT3a.

## Storage

**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

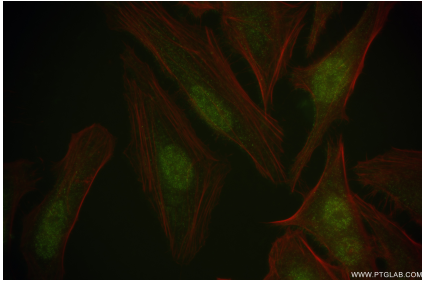
For technical support and original validation data for this product please contact:

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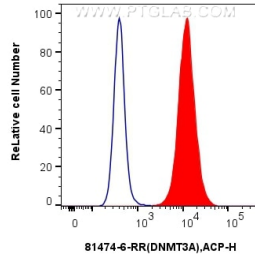
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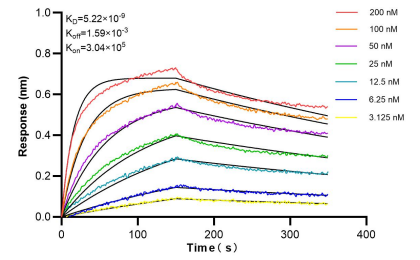
## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using DNMT3A antibody (81474-6-RR, Clone: 242257A9) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 81474-6-PBS in a different storage buffer formulation.



1x10<sup>6</sup> HepG2 cells were intracellularly stained with 0.25 ug Dnmt3a Recombinant Antibody (81474-6-RR, Clone:242257A9) and APC-Conjugated Goat Anti-Rabbit IgG(H+L) (red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set. This data was developed using the same antibody clone with 81474-6-PBS in a different storage



Bi-layer interferometry (BLI) kinetic assays of 81474-6-RR against Human DNMT3A were performed. The affinity constant is 5.22 nM.