

For Research Use Only

DNMT3A Recombinant antibody

Catalog Number: 81474-6-RR



Basic Information

Catalog Number: 81474-6-RR	GenBank Accession Number: BC043617	Purification Method: Protein A purification
Size: 1000 µg/ml	GeneID (NCBI): 1788	CloneNo.: 242257A9
Source: Rabbit	UNIPROT ID: Q9Y6K1	Recommended Dilutions: IF/ICC 1:200-1:800
Isotype: IgG	Full Name: DNA (cytosine-5-)-methyltransferase 3 alpha	
Immunogen Catalog Number: AG15111	Calculated MW: 912 aa, 102 kDa	

Applications

Tested Applications: IF/ICC, FC (Intra), ELISA	Positive Controls: IF/ICC : HeLa cells,
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 -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

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

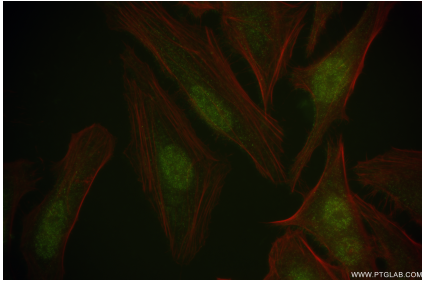
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E: Proteintech-CN@ptglab.com

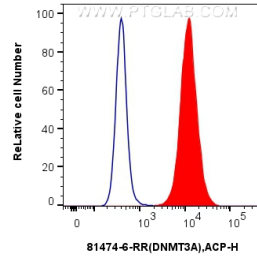
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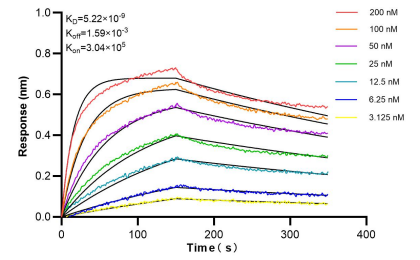
Selected Validation Data



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).



1x10⁶ 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.



Bioluminescence resonance energy transfer (BLI) kinetic assays of 81474-6-RR against Human DNMT3A were performed. The affinity constant is 5.22 nM.