For Research Use Only

DNMT3A Recombinant antibody

Catalog Number:81474-5-RR

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Basic Information

Catalog Number:
81474-5-RR

Size:
100ul , Concentration: 1000 μg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG15111

GenBank Accession Number:
BC043617

GeneID (NCBI):
1788

UNIPROT ID:
Q9Y6K1

Full Name:
DNA (cytosine-5-)-methyltransferase 3 alpha

Calculated MW:
912 aa, 102 kDa

Observed MW:
130 kDa

Purification Method:
Protein A purfication

CloneNo.:
242257E1

Recommended Dilutions:
WB 1:2000-1:10000

Applications

Tested Applications:
WB, ELISA

Species Specificity:
human, mouse, rat

Positive Controls:

WB : Jurkat cells, rat testis tissue, MCF-7 cells, HEK-293 cells, NIH/3T3 cells

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. It is expected to detect the 120-130 kDa DNMT3a but not 72-100 kDa DNMT3a2.

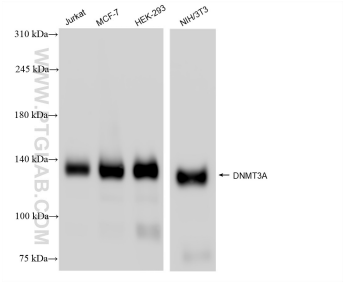
Storage

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

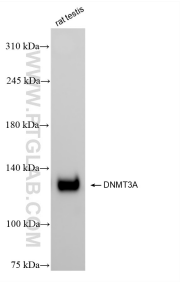
***** 20ul sizes contain 0.1% BSA**

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

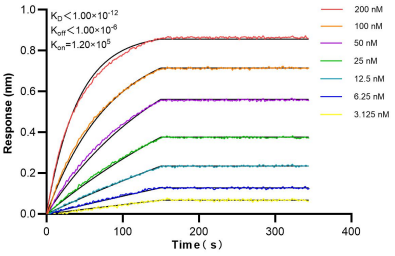
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 81474-5-RR (DNMT3A antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



rat testis tissue were subjected to SDS PAGE followed by western blot with 81474-5-RR (DNMT3A antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Biolayer interferometry (BLI) kinetic assays of 81474-5-RR against Human DNMT3A were performed. The affinity constant is below 1 pM.