

For Research Use Only

DNMT3A Polyclonal antibody, PBS Only

Catalog Number: 20954-1-PBS

Featured Product



Basic Information

Catalog Number:

20954-1-PBS

Size:

100ug, Concentration: 1 mg/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:

120-130 kDa

Purification Method:

Antigen affinity purification

Applications

Tested Applications:

WB, IHC, IF/ICC, IP, Indirect ELISA

Species Specificity:

human, mouse, rat

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 -80°C.

Storage Buffer:

PBS Only

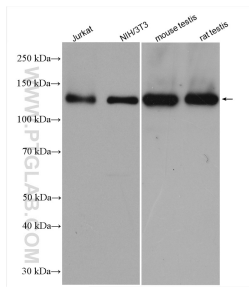
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

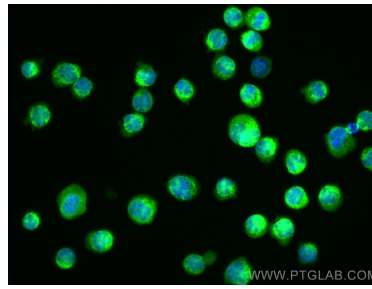
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

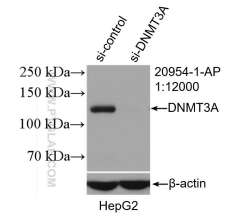
Selected Validation Data



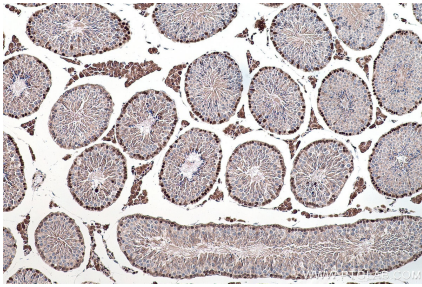
Various lysates were subjected to SDS PAGE followed by western blot with 20954-1-AP (DNMT3A antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 20954-1-PBS in a different storage buffer formulation.



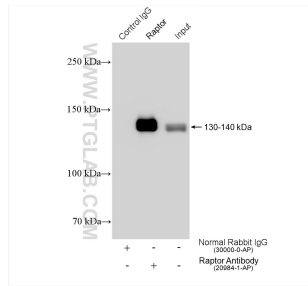
Immunofluorescent analysis of (4% PFA) fixed K-562 cells using DNMT3A antibody (20954-1-AP) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). This data was developed using the same antibody clone with 20954-1-PBS in a different storage buffer formulation.



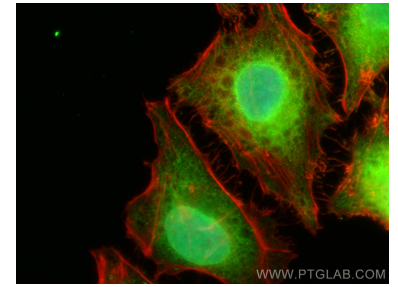
WB result of DNMT3A antibody (20954-1-AP; 1:12000; incubated at room temperature for 1.5 hours) with sh-Control and sh-DNMT3A transfected HepG2 cells. This data was developed using the same antibody clone with 20954-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using 20954-1-AP (DNMT3A antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 20954-1-PBS in a different storage buffer formulation.



IP result of anti-DNMT3A (IP:20954-1-AP, 4ug; Detection:20954-1-AP 1:5000) with HeLa cells lysate 1560 ug. This data was developed using the same antibody clone with 20954-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using DNMT3A antibody (20954-1-AP) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red). This data was developed using the same antibody clone with 20954-1-PBS in a different storage buffer formulation.