

Rabbit PRMT7 Polyclonal Antibody | anti-PRMT7 antibody

Anti-PRMT7 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127301	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

PRMT7; Polyclonal Antibody; Anti-PRMT7 Antibody Picoband; Serine protease HTRA3; 3.4.21.-; High-temperature requirement factor A3; Pregnancy-related serine protease; HTRA3; PRSP; anti-PRMT7 antibody

PRODUCT SPECIFICATIONS

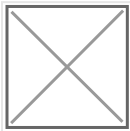
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Widely expressed, with highest levels in both adult and fetal heart, ovary, uterus/placenta, and bladder. In the endometrium, Expressed in epithelial glands and the stroma. Also present in leukocytes. Isoform 1 is predominant in heart and skeletal muscle, whereas isoform 2 is predominant in placenta and kidney.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-PRMT7 antibody	ELISA, FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E coli-derived human PRMT7 recombinant protein (Position: K121-D526).
Subcellular Localization	Secreted, Secretion increased during decidualization of endometrial stromal cells
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Serine protease that cleaves beta-casein/CSN2 as well as several extracellular matrix (ECM) proteoglycans such as decorin/DCN, biglycan/BGN and fibronectin/FN1. Inhibits signaling mediated by TGF-beta family proteins possibly inly by degradation of these ECM proteoglycans (By similarity). May act as a tumor suppressor. Negatively regulates, in vitro, trophoblast invasion during placental development and may be involved in the development of the placenta in vivo. May also have a role in ovarian development, granulosa cell differentiation and luteinization (PubMed:21321049, PubMed:22229724).
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.



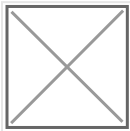
FCM/FACS (Flow Cytometry)
Figure 5. Flow Cytometry analysis of HepG2 cells using anti-PRMT7 antibody (AAA127301). Overlay histogram showing HepG2 cells stained with AAA127301 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PRMT7 Antibody (AAA127301, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohistochemistry)
Figure 4. IHC analysis of PRMT7 using anti-PRMT7 antibody (AAA127301). PRMT7 was detected in a paraffin-embedded section of rat testis tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-PRMT7 Antibody (AAA127301) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



IHC (Immunohistochemisrty)
Figure 3. IHC analysis of PRMT7 using anti-PRMT7 antibody (AAA127301). PRMT7 was detected in a paraffin-embedded section of mouse testis tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-PRMT7 Antibody (AAA127301) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



IHC (Immunohiostchemistry)
Figure 2. IHC analysis of PRMT7 using anti-PRMT7 antibody (AAA127301). PRMT7 was detected in a paraffin-embedded section of human ovarian cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-PRMT7 Antibody (AAA127301) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



WB (Western Blot)
Figure 1. Western blot analysis of PRMT7 using anti-PRMT7 antibody (AAA127301). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PRMT7 antigen affinity purified polyclonal antibody (#AAA127301) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PRMT7 at approximately 78 kDa. The expected band size for PRMT7 is at 78 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-PRMT7 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-PRMT7 antibody	Primary Antibodies; Alzheimer's Disease; Cell Biology; Metalloprotease; Neurodegenerative Disease; Neurology Process; Neuroscience; Proteolysis/Ubiquitin; Proteolytic Enzymes; Sensory System; Visual System
References	1. Akawi, N., McRae, J., Ansari, M., Balasubramanian, M., Blyth, M., Brady, A. F., Clayton, S., Cole, T., Deshpande, C., Fitzgerald, T. W., Foulds, N., Francis, R., and 30 others. Discovery of four recessive developmental disorders using probabilistic genotype and phenotype matching among 4,125 families. Nature Genet. 47: 1363-1369, 2015. 2. Birnbaum, R., Yosha-Orpaz, N., Yanoov-Sharav, M., Kidron, D., Gur, H., Yosovich, K., Lerman-Sagie, T., Malinger, G. Prenatal and postnatal presentation of PRMT7 related syndrome: expanding the phenotypic manifestations. Am. J. Med. Genet. 179A: 78-84, 2019.3. Kernohan, K. D., McBride, A., Xi, Y., Martin, N., Schwartzentruber, J., Dymont, D. A., Majewski, J., Blaser, S. Care4Rare Canada Consortium, Boycott, K. M., Chitayat, D. Loss of the arginine methyltransferase (sic) PRMT7 causes syndromic intellectual disability with microcephaly and brachydactyly. Clin. Genet. 91: 708-716, 2017.

NCBI AND UNIPROT INFORMATION

NCBI GI #	9506615
NCBI GeneID	54496
NCBI Accession #	NP_061896.1
NCBI GenBank Nucleotide #	NM_019023.2
UniProt Accession #	Q9NVM4; Q96PV5; Q9H9L0; B3KPR0; B3KUG9; B4E379
Molecular Weight	63,806 Da
NCBI Official Full Name	protein arginine N-methyltransferase 7 isoform 1
NCBI Official Synonym Full Names	protein arginine methyltransferase 7
NCBI Official Symbol	PRMT7
NCBI Protein Information	protein arginine N-methyltransferase 7; histone-arginine N-methyltransferase PRMT7; myelin basic protein-arginine N-methyltransferase
UniProt Protein Name	Protein arginine N-methyltransferase 7
UniProt Gene Name	PRMT7
UniProt Synonym Gene Names	KIAA1933
UniProt Entry Name	ANM7_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/prmt7-antibody-flow-cytometry-immunohistochemistry-western-blot-elisa/127301>