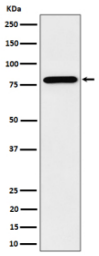
PRMT7 Antibody / Protein arginine methyltransferase 7 [clone 29P93] (FY12779)

Catalog No.	Formulation	Size
FY12779	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Human, Mouse, Rat
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	29P93
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q9NVM4
Applications	Western blot: 1:500-1:2000
Limitations	This PRMT7 antibody is available for research use only.



Western blot analysis of PRMT7 expression in human HeLa cell lysate. Predicted molecular weight ~78 kDa.

Description

PRMT7 antibody detects protein arginine methyltransferase 7, encoded by the PRMT7 gene. This enzyme is also known as HRMT1L2, HMT7, and protein arginine N methyltransferase 7. PRMT7 belongs to the PRMT family, which catalyzes

the methylation of arginine residues on histones and non histone proteins. Unlike most PRMTs that catalyze asymmetric dimethylation, PRMT7 is unique in generating symmetric dimethylarginine. This modification regulates chromatin structure, transcription, RNA processing, and signal transduction. PRMT7 localizes to the nucleus and cytoplasm, where it modifies diverse protein substrates.

PRMT7 antibody is widely applied in epigenetics, RNA biology, and cancer research. By detecting PRMT7, researchers can explore how symmetric arginine dimethylation influences chromatin regulation and cellular signaling. PRMT7 activity has been linked to stem cell pluripotency, DNA repair, stress responses, and immune regulation. In embryonic stem cells, PRMT7 maintains self renewal by repressing differentiation associated genes. In DNA repair, PRMT7 modifies proteins such as histone H4, contributing to recruitment of repair complexes.

Applications of PRMT7 antibody include western blotting, immunohistochemistry, immunofluorescence, and ELISA. Western blotting detects PRMT7 protein in nuclear and cytoplasmic fractions, immunohistochemistry maps expression in tissues such as testis and skeletal muscle, and immunofluorescence highlights dynamic localization in response to stress. These assays provide powerful approaches for analyzing PRMT7 biology across systems.

PRMT7 dysregulation contributes to cancer, immune dysfunction, and developmental syndromes. Amplification or overexpression of PRMT7 has been observed in breast, lung, and hematologic cancers, where it alters gene expression and promotes survival. Loss of PRMT7 function has been associated with intellectual disability syndromes, reflecting its role in neural development. By applying PRMT7 antibody, scientists can investigate how balanced methyltransferase activity is required for normal physiology.

Therapeutically, PRMT7 is a candidate drug target. Inhibitors of PRMT7 are under development to modulate arginine methylation in cancer and immune diseases. Detection of PRMT7 expression by antibody based assays provides biomarkers for preclinical studies and therapeutic development. NSJ Bioreagents offers PRMT7 antibody with strong specificity and reproducibility, supporting both mechanistic and translational studies.

Application Notes

Optimal dilution of the PRMT7 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human PRMT7 was used as the immunogen for the PRMT7 antibody.

Storage

Store the PRMT7 antibody at -20oC.

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