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PRMT2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1002a

Product Information

Application	IHC-P, WB, E
Primary Accession	P55345
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB0027
Calculated MW	49042
Antigen Region	22-53

Additional Information

Gene ID	3275
Other Names	Protein arginine N-methyltransferase 2, 211-, Histone-arginine N-methyltransferase PRMT2, PRMT2, HMT1, HRMT1L1
Target/Specificity	This PRMT2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 22-53 amino acids from the N-terminal region of human PRMT2.
Dilution	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PRMT2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PRMT2
Synonyms	HMT1, HRMT1L1
Function	Arginine methyltransferase that methylates the guanidino nitrogens of

	arginyl residues in proteins such as STAT3, FBL, histone H4 (PubMed:19405910). Acts as a coactivator (with NCOA2) of the androgen receptor (AR)-mediated transactivation (PubMed:17587566). Acts as a coactivator (with estrogen) of estrogen receptor (ER)-mediated transactivation (PubMed:12039952). Enhances PGR, PPARG, RARA-mediated transactivation (PubMed:12039952). May inhibit NF-kappa-B transcription and promote apoptosis (PubMed:16648481). Represses E2F1 transcriptional activity (in a RB1-dependent manner) (By similarity). May be involved in growth regulation (By similarity). Involved in PRMT2IP-mediated inhibition of the microglial inflammatory responses through suppression of NF-kappa-B signaling, thereby reducing the production of pro- inflammatory cytokines (PubMed:38892217).
Cellular Location	[Isoform 1]: Cytoplasm. Nucleus. Note=Translocates from the cytoplasm to the nucleus, after hormone exposure (PubMed:17587566). Excluded from nucleolus (PubMed:22093364). [Isoform PRMT2Beta]: Cytoplasm. Nucleus Nucleus, nucleolus [Isoform PRMT2L2]: Cytoplasm. Nucleus Note=Predominantly cytoplasmic
Tissue Location	Widely expressed. Highly expressed in androgen target organs such as heart, prostate, skeletal muscle, ovary and spinal cord.

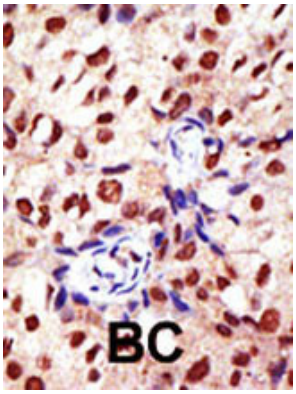
Background

Arginine methylation is an irreversible post translational modification which has only recently been linked to protein activity. At least three types of PRMT enzymes have been identified in mammalian cells. These enzymes have been shown to have essential regulatory functions by methylation of key proteins in several fundamental areas. These protein include nuclear proteins, IL enhancer binding factor, nuclear factors, cell cycle proteins, signal transduction proteins, apoptosis proteins, and viral proteins. The mammalian PRMT family currently consists of 7 members that share two large domains of homology. Outside of these domains, epitopes were identified and antibodies against all 7 PRMT members have been developed.

References

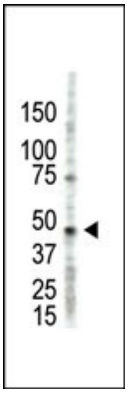
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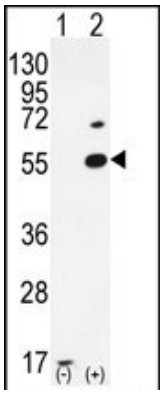
Images



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

The anti-PRMT2 Pab (Cat. #AP1002a) is used in Western blot to detect PRMT2 in HL60 cell lysate.





Western blot analysis of PRMT2 (arrow) using rabbit polyclonal PRMT2 Antibody (A37) (Cat. #AP1002a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the PRMT2 gene.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.