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APOBEC3B Rabbit pAb

Catalog # AP97755

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q9UH17
Other Accession	Q9UH17
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	45924
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human APOBEC3B
Epitope Specificity	1-100/382
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	It is one of seven related genes or pseudogenes found in a cluster, thought to result from gene duplication, on chromosome 22. Belongs to the cytidine and deoxycytidylate deaminase family. Contains 2 CMP/dCMP deaminase zinc-binding domains
SUBUNIT	Homodimer. Interacts with APOBEC3G. Does not interact with APOBEC1.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	APOBEC proteins inhibit retroviruses by deaminating cytosine residues of viral RNA and DNA. The seven APOBEC3 genes or pseudogenes are found in a cluster thought to result from gene duplication on chromosome 22. APOBEC3 proteins are thought to be RNA editing enzymes and have roles in cell growth. APOBEC3B, also known as phorbolin-1-related protein or phorbolin-2/3, is a 382 amino acid protein belonging to the cytidine and deoxycytidylate deaminase family. APOBEC3B lacks cytidine deaminase activity on RNA molecules, but has been shown to bind to apoB and AU-rich RNAs. APOBEC3B forms a homodimer and interacts with APOBEC3G. APOBEC3B is expressed at at moderate levels in heart, testis, thymus, prostate, ovary, spleen and peripheral blood leukocytes.

Additional Information

Gene ID	9582
Other Names	A3B; APOBEC1L; ARCD3; ARP4; DJ742C19.2; PHRBNL; bK150C2.2; Apobec3b; Apobec3f; ABC3B_HUMAN; Phorbolin-1-related protein; Phorbolin-2/3; 3.5.4.38; ABEC3_RAT; Apobec3; apolipoprotein B mRNA editing enzyme catalytic subunit 3B; apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3B; phorbolin 3
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	APOBEC3B
Function	DNA deaminase (cytidine deaminase) which acts as an inhibitor of retrovirus replication and retrotransposon mobility via deaminase- dependent and -independent mechanisms. After the penetration of retroviral nucleocapsids into target cells of infection and the initiation of reverse transcription, it can induce the conversion of cytosine to uracil in the minus-sense single-strand viral DNA, leading to G-to-A hypermutations in the subsequent plus-strand viral DNA. The resultant detrimental levels of mutations in the proviral genome, along with a deamination-independent mechanism that works prior to the proviral integration, together exert efficient antiretroviral effects in infected target cells. Selectively targets single-stranded DNA and does not deaminate double-stranded DNA or single- or double-stranded RNA. Exhibits antiviral activity against simian immunodeficiency virus (SIV), hepatitis B virus (HBV) and human T-cell leukemia virus type 1 (HTLV-1) and may inhibit the mobility of LTR and non-LTR retrotransposons.
Cellular Location	Nucleus
Tissue Location	Expressed at high and moderate levels in peripheral blood leukocytes, spleen, testes, heart, thymus, prostate and ovary Also expressed at low levels in several other tissues

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