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# APOBEC3C Antibody (C-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22152b

## Product Information

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| **Application** | WB, E |
| **Primary Accession** | Q9NRW3 |
| **Reactivity** | Human |
| **Host** | Rabbit |
| **Clonality** | polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB56223 |
| **Calculated MW** | 22826 |

## Additional Information

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| **Gene ID** | 27350 |
| **Other Names** | DNA dC->dU-editing enzyme APOBEC-3C, A3C, 3.5.4.-, APOBEC1-like, Phorbolin I, APOBEC3C, APOBEC1L, PBI |
| **Target/Specificity** | This APOBEC3C antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 143-177 amino acids from human APOBEC3C. |
| **Dilution** | WB~~1:2000 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification. |
| **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** | APOBEC3C Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | APOBEC3C |
| **Synonyms** | APOBEC1L, PBI |
| **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 |

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| | 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), herpes simplex virus 1 (HHV-1) and Epstein-Barr virus (EBV) and may inhibit the mobility of LTR and non- LTR retrotransposons. May also play a role in the epigenetic regulation of gene expression through the process of active DNA demethylation. |
| **Cellular Location** | Nucleus. Cytoplasm |
| **Tissue Location** | Expressed in spleen, testes, peripherical blood lymphocytes, heart, thymus, prostate and ovary |

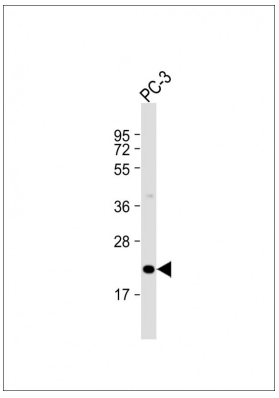
## Background

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), herpes simplex virus 1 (HHV-1) and Epstein-Barr virus (EBV) and may inhibit the mobility of LTR and non-LTR retrotransposons. May also play a role in the epigenetic regulation of gene expression through the process of active DNA demethylation.

## References


Gu J.,et al.Submitted (JUL-1999) to the EMBL/GenBank/DDBJ databases.
Collins J.E.,et al.Genome Biol. 5:R84.1-R84.11(2004).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Dunham I.,et al.Nature 402:489-495(1999).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.


## Images




Anti-APOBEC3C Antibody (C-Term) at 1:2000 dilution + PC-3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 23 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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