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# APOBEC3C Blocking Peptide (C-Term)

**Synthetic peptide**
**Catalog # BP22152b**

## Specification

### APOBEC3C Blocking Peptide (C-Term) - Product Information

Primary Accession Q9NRW3

### APOBEC3C Blocking Peptide (C-Term) - Additional Information

**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**
The synthetic peptide sequence is selected from aa 163-177 of HUMAN APOBEC3C

**Format**
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### APOBEC3C Blocking Peptide (C-Term) - Protein Information

**Name** APOBEC3C

**Synonyms** APOBEC1L, PBI

**Function**
DNA deaminase (cytidine deaminase) which acts as an inhibitor of retrovirus replication and retrotransposon mobility via

### APOBEC3C Blocking Peptide (C-Term) - 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.

### APOBEC3C Blocking Peptide (C-Term) - 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).
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Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.

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.

**Cellular Location**
Nucleus. Cytoplasm

**Tissue Location**
Expressed in spleen, testes, peripherical blood lymphocytes, heart, thymus, prostate and ovary

## APOBEC3C Blocking Peptide (C-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides