

APOBEC3B (PHO3) Antibody (C-term) Blocking peptide

Synthetic peptide Catalog # BP1353a

Specification

APOBEC3B (PHO3) Antibody (C-term) Blocking peptide - Product Information

Primary Accession

Q9UH17

APOBEC3B (PHO3) Antibody (C-term) Blocking peptide - Additional Information

Gene ID 9582

Other Names

DNA dC->dU-editing enzyme APOBEC-3B, A3B, 354-, Phorbolin-1-related protein, Phorbolin-2/3, APOBEC3B

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP1353a was selected from the C-term region of human PHO3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

APOBEC3B (PHO3) Antibody (C-term) Blocking peptide - 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

APOBEC3B (PHO3) Antibody (C-term) Blocking peptide - Protocols

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

• Blocking Peptides

APOBEC3B (PHO3) Antibody (C-term) Blocking peptide - Images

APOBEC3B (PHO3) Antibody (C-term) Blocking peptide - Background

PHO3 is a member of the cytidine deaminase gene family. The PHO3 gene is one of seven related genes or pseudogenes found in a cluster, thought to result from gene duplication, on chromosome 22. Members of the cluster encode proteins that are structurally and functionally related to the C to U RNA-editing cytidine deaminase APOBEC1. It is thought that the proteins may be RNA editing enzymes and have roles in growth or cell cycle control.

APOBEC3B (PHO3) Antibody (C-term) Blocking peptide - References

Wedekind, J.E., et al., Trends Genet. 19(4):207-216 (2003). Jarmuz, A., et al., Genomics 79(3):285-296 (2002). Madsen, P., et al., J. Invest. Dermatol. 113(2):162-169 (1999).