

PHO1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP1354a**Specification**

PHO1 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [P31941](#)**PHO1 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 100913187;200315**Other Names**

DNA dC->dU-editing enzyme APOBEC-3A, A3A, 354-, Phorbolin-1, APOBEC3A

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP1354a](/product/products/AP1354a) was selected from the N-term region of human PHO1. 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.

PHO1 Antibody (N-term) Blocking Peptide - Protein Information**Name** APOBEC3A**Function**

DNA deaminase (cytidine deaminase) with restriction activity against viruses, foreign DNA and mobility of retrotransposons. Exhibits antiviral activity against adeno-associated virus (AAV) and human T- cell leukemia virus type 1 (HTLV-1) and may inhibit the mobility of LTR and non-LTR retrotransposons. Selectively targets single-stranded DNA and can deaminate both methylcytosine and cytosine in foreign DNA. Can induce somatic hypermutation in the nuclear and mitochondrial DNA. 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 peripheral leukocytes with higher expression in CD14-positive phagocytic cells. Highly expressed in keratinocytes and in periphery blood monocytes. Also detected in non-lymphoid tissues including lung and adipose tissues. Found at high levels in colorectal adenocarcinoma, Burkitt's lymphoma and chronic myelogenous leukemia.

PHO1 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

PHO1 Antibody (N-term) Blocking Peptide - Images

PHO1 Antibody (N-term) Blocking Peptide - Background

PHO1 a member of the cytidine deaminase gene family. The PHO1 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. This gene encodes a protein that lacks the zinc binding activity and may be an expressed pseudogene.

PHO1 Antibody (N-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).