

PHO1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1354A

Specification

PHO1 Antibody (N-term) - Product Information

Application IHC-P, WB,E
Primary Accession P31941
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 1-30

PHO1 Antibody (N-term) - Additional Information

Gene ID 100913187;200315

Other Names

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

Target/Specificity

This PHO1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human PHO1.

Dilution

IHC-P~~1:50~100 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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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

PHO1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PHO1 Antibody (N-term) - 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





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(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

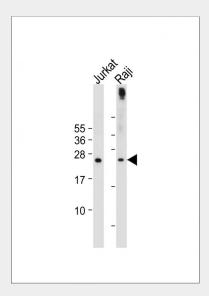
Expressed in peripheral leukocytes with higher expression in CD14-positive phagocytic cells. Highly expressed in keratinocytes and in periphery blood monocytes. Also detected in nonlymphoid tissues including lung and adipose tissues. Found at high levels in colorectal adenocarcinoma, Burkitt's lymphoma and chronic myelogenous leukemia.

PHO1 Antibody (N-term) - Protocols

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

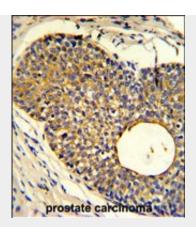
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PHO1 Antibody (N-term) - Images



All lanes: Anti-hPHO1-M1 at 1:2000 dilution Lane 1: Jurkat whole cell lysate Lane 2: Raji 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.





Formalin-fixed and paraffin-embedded human prostate carcinoma reacted with PHO1 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

PHO1 Antibody (N-term) - 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) - 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).

PHO1 Antibody (N-term) - Citations

- IncNBAT1/APOBEC3A is a mediator of HBX-induced chemoresistance in diffuse large B cell lymphoma cells
- <u>Multiregion whole-genome sequencing depicts intratumour heterogeneity and punctuated</u> evolution in ovarian clear cell carcinoma
- Baculovirus infection of human monocyte-derived dendritic cells restricts HIV-1 replication.
- Interaction of Vpx and apolipoprotein B mRNA-editing catalytic polypeptide 3 family member A (APOBEC3A) correlates with efficient lentivirus infection of monocytes.