

**PHO1 Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1354A****Specification**

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**PHO1 Antibody (N-term) - Product Information**

Application	IHC-P, WB,E
Primary Accession	<a href="#">P31941</a>
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-&gt;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

(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.

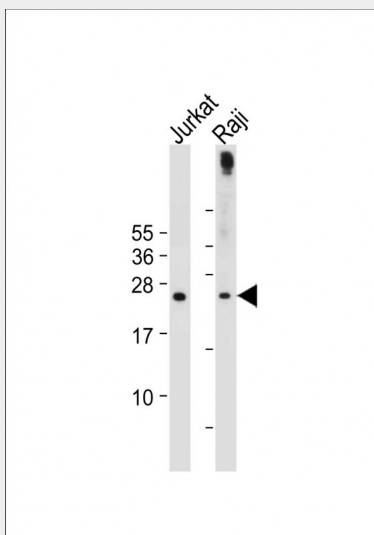
**Tissue Location**

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.

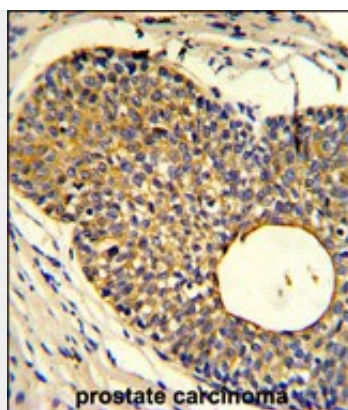
**PHO1 Antibody (N-term) - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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](#)
- [Multiregion whole-genome sequencing depicts intratumour heterogeneity and punctuated 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](#)