

**AK7 Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7076d****Specification**

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**AK7 Antibody (C-term) - Product Information**

Application	IHC-P, WB,E
Primary Accession	<a href="#">O96M32</a>
Other Accession	<a href="#">O95JP6</a> , <a href="#">NP_689540</a>
Reactivity	Human
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	82658
Antigen Region	629-656

**AK7 Antibody (C-term) - Additional Information****Gene ID** 122481**Other Names**

Adenylate kinase 7, AK 7, ATP-AMP transphosphorylase 7, AK7

**Target/Specificity**

This AK7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 629-656 amino acids from the C-terminal region of human AK7.

**Dilution**

IHC-P~~1:50~100

WB~~1:1000

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**

AK7 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**AK7 Antibody (C-term) - Protein Information****Name** AK7

**Function** Nucleoside monophosphate (NMP) kinase that catalyzes the reversible transfer of the terminal phosphate group between nucleoside triphosphates and monophosphates. Has highest activity toward AMP, and weaker activity toward dAMP, CMP and dCMP. Also displays broad nucleoside diphosphate kinase activity. Involved in maintaining ciliary structure and function.

**Cellular Location**

Cytoplasm, cytosol. Cell projection, cilium, flagellum Note=Detected along the full length of sperm flagellum, where it colocalizes with alpha-tubulin.

**Tissue Location**

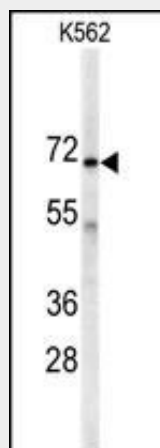
Expressed in sperm and airway epithelial cells (at protein level).

**AK7 Antibody (C-term) - Protocols**

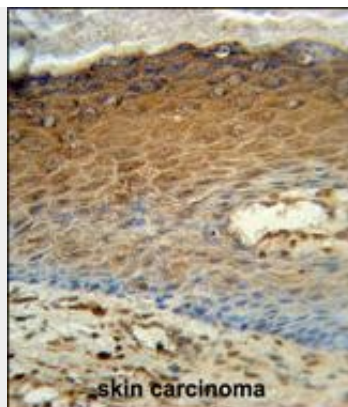
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**AK7 Antibody (C-term) - Images**



Western blot analysis of anti-AK7 Antibody (C-term) (Cat.#AP7076d) in K562 cell line lysates (35ug/lane).AK7(arrow) was detected using the purified Pab.



AK7 Antibody (C-term) (Cat. #AP7076d) immunohistochemistry analysis in formalin fixed and paraffin embedded human skin carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the AK7 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

#### **AK7 Antibody (C-term) - Background**

The adenylate kinases (AK) are a family of structurally and functionally related enzymes that catalyze a similar reaction,  $\text{MgNTP} + \text{AMP} = \text{MgNDP} + \text{ADP}$  ( $\text{N} = \text{A or G}$ ). The AK enzymes are important for maintenance of homeostasis of the adenine and guanine nucleotide pools. AK1 is a cytosolic enzyme for which ATP is the substrate. AK2 catalyzes the same reaction as AK1, but it is localized in the mitochondrial intermembrane space. AK3 is present in the mitochondrial matrix and prefers GTP over ATP as the substrate.

#### **AK7 Antibody (C-term) - References**

Ota, T., et al., Nat. Genet. 36(1):40-45 (2004).