

**PDXK Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7079a**

**Specification**

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

Application	WB,E
Primary Accession	<a href="#">O00764</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	35102
Antigen Region	1-30

**PDXK Antibody (N-term) - Additional Information**

**Gene ID** 8566

**Other Names**

Pyridoxal kinase, Pyridoxine kinase, PDXK, C21orf124, C21orf97, PKH, PNK

**Target/Specificity**

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

**Dilution**

WB~~1:1000

**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**

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

**PDXK Antibody (N-term) - Protein Information**

**Name** PDXK ([HGNC:8819](#))

**Function** Catalyzes the phosphorylation of the dietary vitamin B6 vitamers pyridoxal (PL), pyridoxine (PN) and pyridoxamine (PM) to form pyridoxal 5'-phosphate (PLP), pyridoxine 5'-phosphate (PNP) and pyridoxamine 5'-phosphate (PMP), respectively (Probable)

(PubMed:[10987144](#), PubMed:[17766369](#), PubMed:[19351586](#), PubMed:[31187503](#), PubMed:[9099727](#)). PLP is the active form of vitamin B6, and acts as a cofactor for over 140 different enzymatic reactions.

#### Cellular Location

Cytoplasm, cytosol.

#### Tissue Location

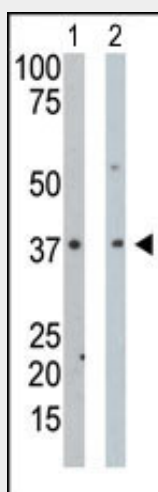
Ubiquitous (PubMed:[31187503](#), PubMed:[9099727](#)). Highly expressed in testis (PubMed:[9099727](#))

### PDXK Antibody (N-term) - Protocols

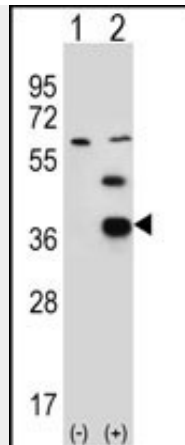
Provided below are standard protocols that you may find useful for product applications.

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

### PDXK Antibody (N-term) - Images



The anti-PDXK Pab (Cat. #AP7079a) is used in Western blot to detect PDXK in mouse intestine tissue lysate (Lane 1) and HeLa cell lysate (Lane 2).



Western blot analysis of PDXK (arrow) using rabbit polyclonal PDXK Antibody (H13) (Cat. #AP7079a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the PDXK gene.

#### **PDXK Antibody (N-term) - Background**

Pyridoxal kinase (PDXK) converts vitamin B6 to pyridoxal-5-phosphate (PLP), an essential cofactor in the intermediate metabolism of amino acids and neurotransmitters. The PDXK gene encodes a 312-amino acid polypeptide, and expression of the cDNA reveals pyridoxal kinase activity. Northern blot analysis revealed that a major 1.5-kb PDXK transcript is expressed in all tissues tested. The expression of PDXK shows circadian oscillations. The expression of Pdxk in mouse liver and brain is regulated by the 3 PAR bZIP transcription factors, Dbp, Hlf, and Tef, which also show circadian oscillations in expression. Mice devoid of all 3 transcription factors show decreased levels of brain PLP, serotonin, and dopamine, and are highly susceptible to frequently lethal generalized spontaneous and audiogenic epilepsies.