

PDXP Antibody (C-Term)
Peptide-affinity purified goat antibody
Catalog # AF3387a**Specification**

PDXP Antibody (C-Term) - Product Information

Application	WB
Primary Accession	O96GD0
Other Accession	NP_064711.1 , 57026 , 57028 (mouse) , 727679 (rat)
Reactivity	Human, Mouse, Rat
Predicted	Cow
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	31698

PDXP Antibody (C-Term) - Additional Information**Gene ID** 57026**Other Names**

Pyridoxal phosphate phosphatase, PLP phosphatase, 3.1.3.3, 3.1.3.74, Chronophin, PDXP, CIN, PLP, PLPP

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

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

PDXP Antibody (C-Term) - Protein Information**Name** PDXP ([HGNC:30259](#))**Function**

Functions as a pyridoxal phosphate (PLP) phosphatase, which also catalyzes the dephosphorylation of pyridoxine 5'-phosphate (PNP) and pyridoxamine 5'-phosphate (PMP), with order of substrate preference PLP > PNP > PMP and therefore plays a role in vitamin B6 metabolism (PubMed:14522954, PubMed:<a href="http://www.uniprot.org/citations/8132548"

target="_blank">8132548). Also functions as a protein serine phosphatase that specifically dephosphorylates 'Ser-3' in proteins of the actin-depolymerizing factor (ADF)/cofilin family like CFL1 and DSTN. Thereby, regulates cofilin-dependent actin cytoskeleton reorganization, being required for normal progress through mitosis and normal cytokinesis. Does not dephosphorylate phosphothreonines in LIMK1. Does not dephosphorylate peptides containing phosphotyrosine (PubMed:15580268).

Cellular Location

Cytoplasm, cytosol. Cytoplasm, cytoskeleton. Cell projection, ruffle membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, lamellipodium membrane; Peripheral membrane protein; Cytoplasmic side. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Note=Colocalizes with the actin cytoskeleton in membrane ruffles and lamellipodia. Diffusely distributed throughout the cytosol during pro-metaphase and metaphase Detected at the dynamic cell poles during telophase. Detected at the cleavage furrow and contractile ring during cytokinesis. Transiently detected at the plasma membrane in late stages of cytokinesis. Detected at the midbody.

Tissue Location

Ubiquitously expressed (at protein level) (PubMed:23223568). Highly expressed in all the regions of central nerve system except the spinal cord. Also expressed at high level in liver and testis. In fetus, it is weakly expressed in all organs except brain (PubMed:14522954, PubMed:15580268).

PDXP Antibody (C-Term) - Protocols

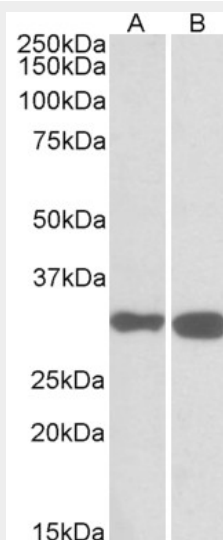
Provided below are standard protocols that you may find useful for product applications.

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

PDXP Antibody (C-Term) - Images



AF3387a (0.1 µg/ml) staining of Human Heart lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF3387a (0.1 µg/ml) staining of Mouse (A) and Rat (B) Brain lysates (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

PDXP Antibody (C-Term) - References

Chronophin mediates an ATP-sensing mechanism for cofilin dephosphorylation and neuronal cofilin-actin rod formation. Huang TY, Minamide LS, Bamburg JR, Bokoch GM, Developmental cell 2008 Nov 15 (5): 691-703. PMID: 19000834