



NIPP1 Polyclonal Antibody

Catalog No	YP-Ab-01909
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;ELISA
Gene Name	PPP1R8
Protein Name	Nuclear inhibitor of protein phosphatase 1
Immunogen	The antiserum was produced against synthesized peptide derived from human PPP1R8. AA range:196-245
Specificity	NIPP1 Polyclonal Antibody detects endogenous levels of NIPP1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PPP1R8; ARD1; NIPP1; Nuclear inhibitor of protein phosphatase 1; NIPP-1; Protein phosphatase 1 regulatory inhibitor subunit 8
Observed Band	40kD
Cell Pathway	Nucleus. Nucleus speckle. Primarily, but not exclusively, nuclear.; [Isoform Gamma]: Cytoplasm. Found mainly in the cytoplasm.
Tissue Specificity	Ubiquitously expressed, with highest levels in heart and skeletal muscle, followed by brain, placenta, lung, liver and pancreas. Less abundant in kidney. The concentration and ratio between isoforms is cell-type dependent. Isoform Alpha (>90%) and isoform Beta were found in brain, heart and kidney. Isoform Gamma is mainly found in B-cells and T-lymphocytes, and has been found in 293 embryonic kidney cells.
Function	cofactor:Magnesium. Endoribonuclease function is magnesium-dependent.,domain:Has a basic N- and C-terminal and an acidic central domain.,function:Inhibitor subunit of the major nuclear protein phosphatase-1 (PP-1). It has RNA-binding activity but does not cleave RNA and may target PP-1 to RNA-associated substrates. May also be involved in pre-mRNA splicing. Binds DNA and might act as a transcriptional repressor. Seems to be required for cell proliferation.,function:Isoform Gamma is a site-specific single-strand endoribonuclease that cleaves single strand RNA 3' to purines and pyrimidines in A+U-rich regions. It generates 5'-phosphate termini at the site of cleavage. This isoform does not inhibit PP-1. May be implicated in



mRNA splicing.,miscellaneous:A synthetic peptide, NIPP-1(330-351), is able to inhibit PP-1. Phosphorylation of Tyr-335 reduces PP-1 inhibition, whereas phosphorylation

Background

This gene, through alternative splicing, encodes three different isoforms. Two of the protein isoforms encoded by this gene are specific inhibitors of type 1 serine/threonine protein phosphatases and can bind but not cleave RNA. The third protein isoform lacks the phosphatase inhibitory function but is a single-strand endoribonuclease comparable to RNase E of E. coli. This isoform requires magnesium for its function and cleaves specific sites in A+U-rich regions of RNA. [provided by RefSeq, Jul 2008],

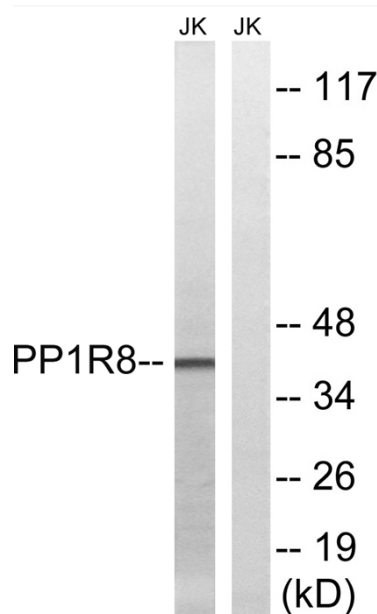
matters needing attention

Avoid repeated freezing and thawing!

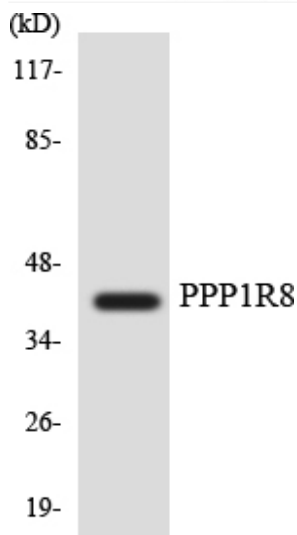
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western blot analysis of lysates from Jurkat cells, using PPP1R8 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HUVEC cells using PPP1R8 antibody.