
Product Name: NIPA Rabbit Polyclonal Antibody**Catalog #: APRab14705**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat,Monkey
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ICC/IF 1:200-1:1000,ELISA 1:20000-1:40000
Molecular Weight	55kDa

Antigen Information

Gene Name	ZC3HC1
Alternative Names	ZC3HC1; NIPA; HSPC216; Nuclear-interacting partner of ALK; Nuclear-interacting partner of anaplastic lymphoma kinase; hNIPA; Zinc finger C3HC-type protein 1
Gene ID	51530.0
SwissProt ID	Q86WB0
Immunogen	The antiserum was produced against synthesized peptide derived from human NIPA. AA range:320-369

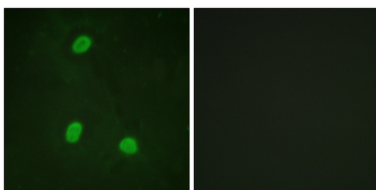
Background

This gene encodes an F-box-containing protein that is a component of an SCF-type E3 ubiquitin ligase complex that regulates the onset of cell division. The G2/M transition in the cell cycle requires the interaction of the proteins cyclin B1 and cyclin-dependent kinase 1. The activated ubiquitin ligase complex targets the protein cyclin B1 for degradation, preventing this transition to mitosis. [provided by RefSeq, Aug 2013],caution:Reported to contain a F-box domain (PubMed:16009132). Such domain is however not predicted by any detection method.,developmental stage:Weakly expressed in G0/G1 phases, abundant during S and G2/M phases, and strongly decreases thereafter.,domain:The F-box-like region is required for the interaction with SKP1A.,function:Essential component of an SCF-type E3 ligase complex, SCF(NIPA), a complex that controls mitotic entry by mediating ubiquitination and subsequent degradation of cyclin B1 (CCNB1). Its cell-cycle-dependent phosphorylation regulates the assembly of the SCF(NIPA) complex, restricting CCNB1 ubiquitination activity to interphase. Its inactivation results in nuclear accumulation of CCNB1 in interphase and premature mitotic entry. May have an antiapoptotic role in NPM-ALK-mediated signaling events.,pathway:Protein modification; protein ubiquitination.,PTM:Phosphorylated. Phosphorylated on Ser residues at G2/M phase, but not during S and G0 phases. May also be weakly phosphorylated on Tyr residues. Ser-354 phosphorylation, a major site during the course of cell-cycle-dependent phosphorylation, results in its dissociation from the SCF(NIPA) complex, thereby preventing CCNB1 degradation leading to mitotic entry.,similarity:Contains 1 C3HC-type zinc finger.,subunit:Interacts with the NPM-ALK fusion protein in a tyrosine phosphorylation-dependent manner. Interacts with SKP1. Component of a SCF(NIPA) E3 complex with SKP1A, RBX1 and CUL1 when not phosphorylated on Ser-354. Interacts with CCNB1.,tissue specificity:Widely expressed. Highly expressed in heart, skeletal muscle and testis. Expressed in brain, placenta, lung, kidney, liver, pancreas, spleen, thymus, prostate, ovary small intestine and colon. Weakly or not expressed in leukocytes.,

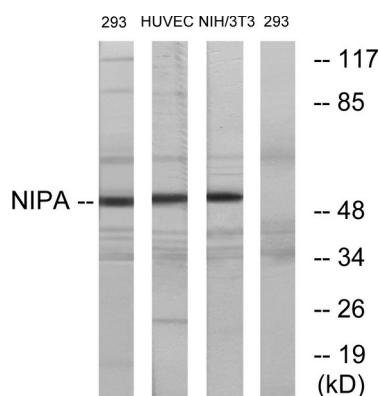
Research Area

Cell Biology; Proteolysis / Ubiquitin; Proteasome / Ubiquitin; Ubiquitin E3 Enzymes; SCF Complex E3 Ligase

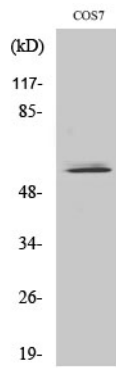
Image Data



Immunofluorescence analysis of HeLa cells, using NIPA Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from 293/HuvEc/NIH/3T3, using NIPA Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using NIPA Polyclonal Antibody diluted at 1:2000.