

Rabbit Anti-phospho-NIPA (Ser354) antibody

SL8364R

Product Name:	phospho-NIPA (Ser354)
Chinese Name:	磷酸化间变性淋巴瘤激酶核相互作用伴侣蛋白抗体
Alias:	NIPA (phospho S354); NIPA (phospho Ser354); p-NIPA (S354); p-NIPA (Ser354); hNIPA; Nuclear interacting partner of ALK; Nuclear interacting partner of anaplastic lymphoma kinase; ZC3HC1; Zinc finger C3HC type containing 1; NIPA_HUMAN.
Organism Species: Rabbit	
Organism Species:	
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Horse, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	55kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human NIPA around the phosphorylation site of Ser354:TR(p-S)WD
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	The regulated oscillation of protein expression is an essential mechanism of cell cycle control. The SCF class of E3 ubiquitin ligases is involved in this process by targeting cell cycle regulatory proteins for degradation by the proteasome, with the F-box subunit of the SCF specifically recruiting a given substrate to the SCF core. NIPA (nuclear

interaction partner of ALK) is a human F-box-containing protein that defines an SCF-type E3 ligase (SCFNIPA) controlling mitotic entry. Assembly of this SCF complex is regulated by cell-cycle-dependent phosphorylation of NIPA, which restricts substrate ubiquitination activity to interphase. Nuclear cyclin B1 is a substrate of SCFNIPA. Inactivation of NIPA by RNAi results in nuclear accumulation of cyclin B1 in interphase, activation of cyclin B1-Cdk1 kinase activity, and premature mitotic entry. Thus, SCFNIPA-based ubiquitination may regulate S-phase completion and mitotic entry in the mammalian cell cycle.

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.

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 SKP1, RBX1 and CUL1 when not phosphorylated on Ser-354. Interacts with CCNB1.

Subcellular Location:

Nuclear.

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.

Post-translational modifications:

hosphorylated. 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-dedendent 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.

SWISS:

Q86WB0

Gene ID:

51530

Database links:

Entrez Gene: 51530Human

Entrez Gene: 232679Mouse

Entrez Gene: 296957Rat

SwissProt: Q86WB0Human

SwissProt: Q80YV2Mouse

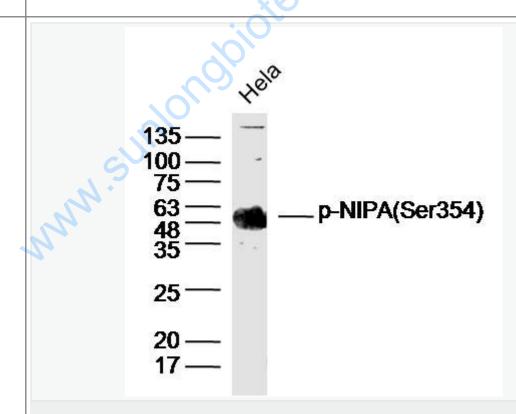
<u>Unigene: 194157</u>Human

Unigene: 29780 Mouse

Unigene: 474686Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Sample:

Hela Cell(Human)Lysate at 30 ug

Primary: Anti- p-NIPA(Ser354) (SL8364R)at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 55kD

Observed band size: 55kD

