

Phospho-ILK(S343) Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3679a

Specification

Phospho-ILK(S343) Antibody - Product Information

Application	DB,E
Primary Accession	Q13418
Other Accession	Q99J82 , Q55222 , Q3SWY2 , Q9DF58
Reactivity	Human
Predicted	Bovine, Chicken, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG

Phospho-ILK(S343) Antibody - Additional Information

Gene ID 3611

Other Names

Integrin-linked protein kinase, 59 kDa serine/threonine-protein kinase, ILK-1, ILK-2, p59ILK, ILK, ILK1, ILK2

Target/Specificity

This ILK Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S343 of human ILK.

Dilution

DB~~1:500

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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

Phospho-ILK(S343) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Phospho-ILK(S343) Antibody - Protein Information

Name ILK ([HGNC:6040](#))

Function Scaffold protein which mediates protein-protein interactions during a range of cellular

events including focal adhesion assembly, cell adhesion and cell migration (PubMed:[17420447](#), PubMed:[20005845](#), PubMed:[30367047](#), PubMed:[32528174](#)). Regulates integrin-mediated signal transduction by contributing to inside-out integrin activation (By similarity). Recruits PARVA and LIMS1/PITCH to form the heterotrimeric IPP (ILK-PINCH-PARVIN) complex which binds to F-actin via the C-terminal tail of LIMS1 and the N-terminal region of PARVA, promoting F-actin filament bundling, a process required to generate force for actin cytoskeleton reorganization and subsequent dynamic cell adhesion events such as cell spreading and migration (PubMed:[30367047](#)). Binding to PARVA promotes effective assembly of ILK into focal adhesions while PARVA-bound ILK can simultaneously engage integrin-beta cytoplasmic tails to mediate cell adhesion (PubMed:[20005845](#)). Plays a role with PARVG in promoting the cell adhesion and spreading of leukocytes (PubMed:[16517730](#)). Acts as an upstream effector of both AKT1/PKB and GSK3 (PubMed:[9736715](#)). Mediates trafficking of caveolae to the cell surface in an ITGB1-dependent manner by promoting the recruitment of IQGAP1 to the cell cortex which cooperates with its effector DIAPH1 to locally stabilize microtubules and allow stable insertion of caveolae into the plasma membrane (By similarity). Required for the maintenance of mitotic spindle integrity by promoting phosphorylation of TACC3 by AURKA (PubMed:[18283114](#)). Associates with chromatin and may act as a negative regulator of transcription when located in the nucleus (PubMed:[17420447](#)).

Cellular Location

Cell junction, focal adhesion. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, lamellipodium {ECO:0000250|UniProtKB:O55222}. Cytoplasm, myofibril, sarcomere. Cytoplasm Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cell cortex {ECO:0000250|UniProtKB:O55222}

Tissue Location

Highly expressed in heart followed by skeletal muscle, pancreas and kidney. Weakly expressed in placenta, lung and liver

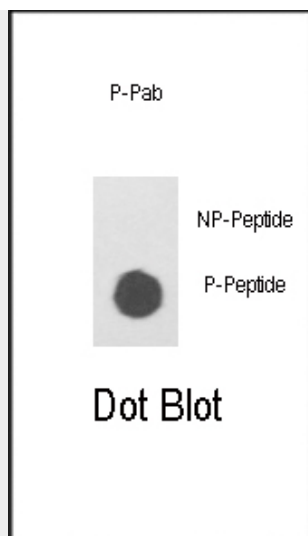
Phospho-ILK(S343) Antibody - Protocols

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](#)

Phospho-ILK(S343) Antibody - Images





Dot blot analysis of anti-Phospho ILK-S343 Pab (Cat. #AP3679a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

Phospho-ILK(S343) Antibody - Background

Transduction of extracellular matrix signals through integrins influences intracellular and extracellular functions, and appears to require interaction of integrin cytoplasmic domains with cellular proteins. Integrin-linked kinase (ILK), interacts with the cytoplasmic domain of beta-1 integrin. ILK is a serine/threonine protein kinase with 4 ankyrin-like repeats, which associates with the cytoplasmic domain of beta integrins and acts as a proximal receptor kinase regulating integrin-mediated signal transduction.

Phospho-ILK(S343) Antibody - References

Li, Y., et al., J. Clin. Invest. 112(4):503-516 (2003). Troussard, A.A., et al., J. Biol. Chem. 278(25):22374-22378 (2003). Marotta, A., et al., Br. J. Cancer 88(11):1755-1762 (2003). Cordes, N., et al., Br. J. Cancer 88(9):1470-1479 (2003). Fukuda, T., et al., J. Cell Biol. 160(7):1001-1008 (2003).

Phospho-ILK(S343) Antibody - Citations

- [β1-integrin restricts astrocytic differentiation of adult hippocampal neural stem cells.](#)
- [Nanofiber-mediated inhibition of focal adhesion kinase sensitizes glioma stemlike cells to epidermal growth factor receptor inhibition.](#)