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ILK Antibody (S343)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7651h

Specification

ILK Antibody (S343) - Product Information

Application	**WB,E**
Primary Accession	Q13418
Other Accession	Q99J82, O55222, Q3SWY2, NP_004508, Q9DF58
Reactivity	**Human**
Predicted	**Bovine, Chicken, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**51419**
Antigen Region	**321-350**

ILK Antibody (S343) - 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 peptide between 321-350 amino acids from human ILK.

Dilution
WB~~1:1000
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
ILK Antibody (S343) is for research use only and not for use in diagnostic or therapeutic procedures.

ILK Antibody (S343) - 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

ILK Antibody (S343) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ILK Antibody (S343) - Images

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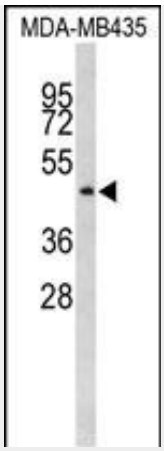

Western blot analysis of ILK-pS343 antibody (Cat. #AP7651h) in MDA-MB435 cell line lysates (35ug/lane). ILK (arrow) was detected using the purified Pab.

ILK Antibody (S343) - 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.

ILK Antibody (S343) - 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).