

# ILK Antibody (T173)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP7651f

## Product Information

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<b>Application</b>	WB, IHC-P, E
<b>Primary Accession</b>	<a href="#">Q13418</a>
<b>Other Accession</b>	<a href="#">Q99J82</a> , <a href="#">Q55222</a> , <a href="#">Q3SWY2</a> , <a href="#">NP_004508</a>
<b>Reactivity</b>	Human
<b>Predicted</b>	Bovine, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB13894
<b>Calculated MW</b>	51419
<b>Antigen Region</b>	151-180

## Additional Information

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<b>Gene ID</b>	3611
<b>Other Names</b>	Integrin-linked protein kinase, 59 kDa serine/threonine-protein kinase, ILK-1, ILK-2, p59ILK, ILK, ILK1, ILK2
<b>Target/Specificity</b>	This ILK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 151-180 amino acids from human ILK.
<b>Dilution</b>	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	ILK Antibody (T173) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	ILK ( <a href="#">HGNC:6040</a> )
<b>Function</b>	Scaffold protein which mediates protein-protein interactions during a range of cellular events including focal adhesion assembly, cell adhesion and cell migration (PubMed: <a href="#">17420447</a> , PubMed: <a href="#">20005845</a> , PubMed: <a href="#">30367047</a> ,

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

## Background

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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.

## References

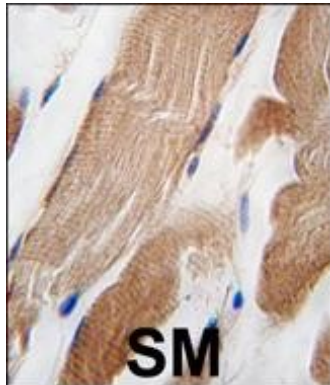
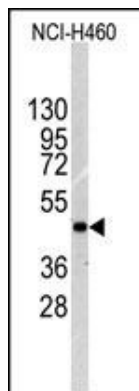
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 Marotta, A., et al., Br. J. Cancer 88(11):1755-1762 (2003).  
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 Fukuda, T., et al., J. Cell Biol. 160(7):1001-1008 (2003).

## Images

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Western blot analysis of anti-ILK Antibody (T173) (RB13894) in NCI-H460 cell line lysates (35ug/lane). EN1(arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human skeletal muscle tissue reacted with Phospho ILK Antibody (T173) (Cat.#AP7651f) antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

## Citations

- [Extracellular Matrix Protein Coating of Processed Fish Scales Improves Human Corneal Endothelial Cell Adhesion and Proliferation.](#)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.