

**ILK2/ILK1 Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7077b****Specification**

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**ILK2/ILK1 Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q13418</a>
Other Accession	<a href="#">Q99J82</a> , <a href="#">O55222</a> , <a href="#">Q3SWY2</a> , <a href="#">P57043</a>
Reactivity	Human, Mouse
Predicted	Bovine, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	51419
Antigen Region	391-421

**ILK2/ILK1 Antibody (C-term) - 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 ILK2/ILK1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 391-421 amino acids from the C-terminal region of human ILK2/ILK1.

**Dilution**

WB~~1:1000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**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**

ILK2/ILK1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**ILK2/ILK1 Antibody (C-term) - 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**

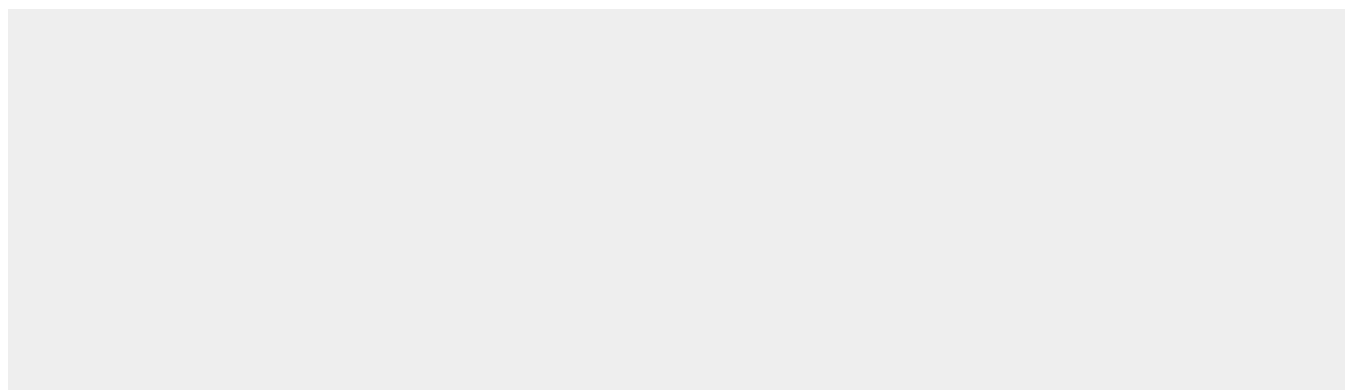
Highly expressed in heart followed by skeletal muscle, pancreas and kidney. Weakly expressed in placenta, lung and liver

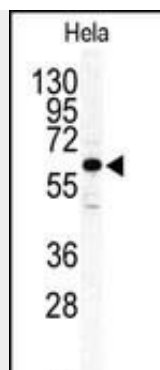
#### **ILK2/ILK1 Antibody (C-term) - Protocols**

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

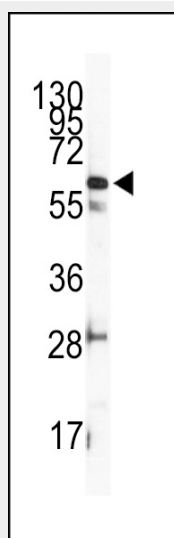
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **ILK2/ILK1 Antibody (C-term) - Images**





Western blot analysis of anti-ILK2/ILK1 Antibody (C-term)(Cat.#AP7077b) in HeLa cell line lysates (35ug/lane). ILK2(arrow) was detected using the purified Pab.



Western blot analysis of anti-ILK2/ILK1 Antibody (C-term) (Cat.#AP7077b) in mouse heart tissue lysates (35ug/lane). ILK2(arrow) was detected using the purified Pab.

### ILK2/ILK1 Antibody (C-term) - 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) is an ankyrin repeat containing 51 kDa receptor-proximate serine-threonine kinase (1), with a reported migration rate of 59K. This 451 amino acid protein interacts with the cytoplasmic domain of the beta-1 integrin subunit and contains sequence motifs found in pleckstrin homology domains capable of interacting with phosphoinositide lipids. ILK is an upstream regulator of  $\text{Pi}(3)\text{K}$  dependant activation of protein kinase B (PKB/AKT) and inhibition of glycogen synthase kinase 3 (GSK-3). ILK2 expression is associated with mediation of cell architecture, adhesion to integrin substrates and anchorage-dependent growth in epithelial cells. ILK2 is overexpressed in some highly invasive tumor cell lines.