

Goat Anti-ILK (Restricted sale due to demands of patent holder) Antibody
Peptide-affinity purified goat antibody
Catalog # AF4126a

Specification

Goat Anti-ILK (Restricted sale due to demands of patent holder) Antibody - Product Information

Application	WB, E
Primary Accession	Q13418
Other Accession	NP_004508.1 , NP_001014794.1 , NP_001014795.1 , 3611
Reactivity	Human, Mouse
Predicted	Rat, Dog
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Calculated MW	51419

Goat Anti-ILK (Restricted sale due to demands of patent holder) Antibody - Additional Information

Gene ID 3611

Other Names

Integrin-linked protein kinase, 2.7.11.1, 59 kDa serine/threonine-protein kinase, ILK-1, ILK-2, p59ILK, ILK, ILK1, ILK2

Dilution

WB~~1:1000

E~~N/A

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-ILK (Restricted sale due to demands of patent holder) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-ILK (Restricted sale due to demands of patent holder) 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

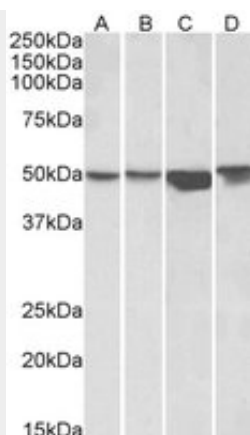
Highly expressed in heart followed by skeletal muscle, pancreas and kidney. Weakly expressed in placenta, lung and liver

Goat Anti-ILK (Restricted sale due to demands of patent holder) 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](#)

Goat Anti-ILK (Restricted sale due to demands of patent holder) Antibody - Images



AF4126a (1 µg/ml) staining of HEK293 (A), A431 (B), HeLa (C) and Jurkat (D) lysates (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



EB05120 (0.5 µg/ml) staining of NIH3T3 lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-ILK (Restricted sale due to demands of patent holder) Antibody - Background

Receptor-proximal protein kinase regulating integrin- mediated signal transduction. May act as a mediator of inside-out integrin signaling. Focal adhesion protein part of the complex ILK-PINCH. This complex is considered to be one of the convergence points of integrin- and growth factor-signaling pathway. Could be implicated in mediating cell architecture, adhesion to integrin substrates and anchorage-dependent growth in epithelial cells. Phosphorylates beta-1 and beta-3 integrin subunit on serine and threonine residues, but also AKT1 and GSK3B.

Goat Anti-ILK (Restricted sale due to demands of patent holder) Antibody - References

Hannigan G.E.,et al.Nature 379:91-96(1996).
Janji B.,et al.Oncogene 19:3069-3077(2000).
Tadic B.,et al.Submitted (MAR-2000) to the EMBL/GenBank/DDBJ databases.
Melchior C.,et al.Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases.
Ebert L.,et al.Submitted (MAY-2004) to the EMBL/GenBank/DDBJ databases.