

ILK Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1763a

Specification

ILK Antibody - Product Information

Application E, WB, FC, IHC

Primary Accession <u>Q13418</u>

Reactivity Human, Mouse, Monkey

Host Mouse
Clonality Monoclonal
Isotype IgG1

Calculated MW 51.4kDa KDa

Description

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. This gene encodes 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. Multiple alternatively spliced transcript variants encoding the same protein have been found for this gene.

Immunogen

Purified recombinant fragment of human ILK (AA: 97-244) expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% sodium azide.

ILK 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

E~~1/10000 WB~~1/500 - 1/2000 FC~~1/200 - 1/400 IHC~~1/200 - 1/1000

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

ILK Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



ILK Antibody - Protein Information

Name ILK (HGNC:6040)

Function

Receptor-proximal protein kinase regulating integrin-mediated signal transduction (PubMed:8538749, PubMed:9736715). May act as a mediator of inside-out integrin signaling (PubMed:10712922). Focal adhesion protein part of the complex ILK-PINCH (PubMed:10712922). This complex is considered to be one of the convergence points of integrin- and growth factor-signaling pathway (PubMed:10712922). Could be implicated in mediating cell architecture, adhesion to integrin substrates and anchorage-dependent growth in epithelial cells (PubMed:10712922). Regulates cell motility by forming a complex with PARVB (PubMed:32528174).

Phosphorylates beta-1 and beta-3 integrin subunit on serine and threonine residues, but also AKT1 and GSK3B (PubMed:http://www.uniprot.org/citations/8538749

target="_blank">8538749, PubMed:9736715).

Cellular Location

Cell junction, focal adhesion. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, lamellipodium {ECO:0000250|UniProtKB:055222}. Cytoplasm, myofibril, sarcomere

Tissue Location

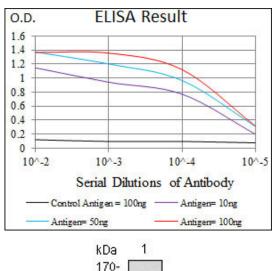
Highly expressed in heart followed by skeletal muscle, pancreas and kidney. Weakly expressed in placenta, lung and liver

ILK 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 Cytomety
- Cell Culture





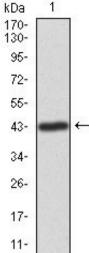


Figure 1: Western blot analysis using ILK mAb against human ILK recombinant protein. (Expected MW is 42.7 kDa)

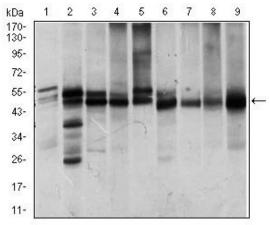


Figure 2: Western blot analysis using ILK mouse mAb against Jurkat (1), NIH3T3 (2), HeLa (3), PC-12 (4), C6 (5), COS7 (6), Raji (7), K562 (8) and MCF-7 (9) cell lysate.



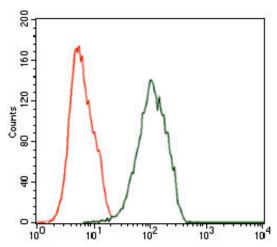


Figure 3: Flow cytometric analysis of Jurkat cells using ILK mouse mAb (green) and negative control (red).

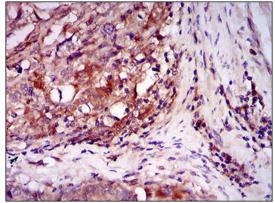


Figure 4: Immunohistochemical analysis of paraffin-embedded esophageal cancer tissues using ILK mouse mAb with DAB staining.

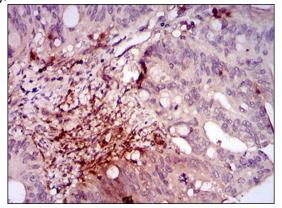


Figure 5: Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using ILK mouse mAb with DAB staining.

ILK Antibody - References

1.Surgery. 2011 Aug;150(2):162-8.2.Int J Cancer. 2012 Feb 1;130(3):521-31.