10320 Camino Santa Fe, Suite G San Diego, CA 92121 Tel: 858.875.1900 Fax: 858.875.1999



Integrin Linked ILK Rabbit mAb

Catalog # AP75626

Product Information

Application WB, IP **Primary Accession** Q13418

Reactivity Human, Mouse, Rat

Host Rabbit

Clonality Monoclonal Antibody

Calculated MW 51419

Additional Information

Gene ID 3611

Other Names ILK

Dilution WB~~1/500-1/1000 IP~~1/20

Format Liquid

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

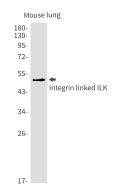
{ECO:0000250|UniProtKB:O55222}. Cytoplasm, myofibril, sarcomere. Cytoplasm Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cell cortex {ECO:0000250 | UniProtKB:O55222}

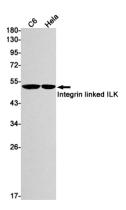
Tissue Location

Highly expressed in heart followed by skeletal muscle, pancreas and kidney.

Weakly expressed in placenta, lung and liver

Images





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