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Store at -20C  
#3862

## ILK1 Antibody

**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R Mk B	Endogenous	51	Rabbit	#Q13418	3611

### Product Usage Information

#### Application

Western Blotting

#### Dilution

1:1000

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

### Specificity/Sensitivity

ILK1 Antibody detects endogenous levels of total ILK1 protein. The antibody may cross-react with ILK2.

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the carboxy-terminus of human ILK1. Antibodies are purified by protein A and peptide affinity chromatography.

### Background

Integrin-linked kinases (ILKs) couple integrins and growth factors to downstream pathways involved in cell survival, cell cycle control, cell-cell adhesion and cell motility (1). ILK functions as a scaffold bridging the extracellular matrix (ECM) and growth factor receptors to the actin cytoskeleton through interactions with integrin, PINCH (which links ILK to the RTKs via Nck2), CH-ILKBP and affixin (1). ILK phosphorylates Akt at Ser473, GSK-3 on Ser9, myosin light chain 2 (MLC2) on Ser18/Thr19, as well as affixin (2-5). These phosphorylation events are key regulatory steps in modulating the activities of the targets. ILK activity is stimulated by PI3 kinase and negatively regulated by the tumor suppressor PTEN and a PP2C protein phosphatase, ILKAP (1,3,6). It has been suggested that the conserved Ser343 residue in the activation loop plays a key role in the activation of ILK1 (2).

### Background References

1. Wu, C. and Dedhar, S. (2000) *J. Biol. Chem.* 275, 505-510.
2. Persad, S. et al. (2001) *J. Biol. Chem.* 276, 27462-27469.
3. Persad, S. et al. (2000) *J. Cell Biol.* 153, 1161-1173.
4. Deng, J.T. et al. (2001) *J. Biol. Chem.* 276, 16365-16373.
5. Yamaji, S. et al. (2001) *J. Cell Biol.* 153, 1251-1264.
6. Morimoto, A.M. et al. (2000) *Oncogene* 19, 200-209.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

### Applications Key

**W:** Western Blotting

### Cross-Reactivity Key

**H:** Human **M:** Mouse **R:** Rat **Mk:** Monkey **B:** Bovine

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