

ILK1 Antibody

Orders ■ 877-616-CELL (2355)
orders@cellsignal.com

Support ■ 877-678-TECH (8324)
info@cellsignal.com

Web ■ www.cellsignal.com

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For Research Use Only. Not For Use In Diagnostic Procedures.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IHC-P Endogenous	H, M, R, Mk, B	51 kDa	Rabbit**

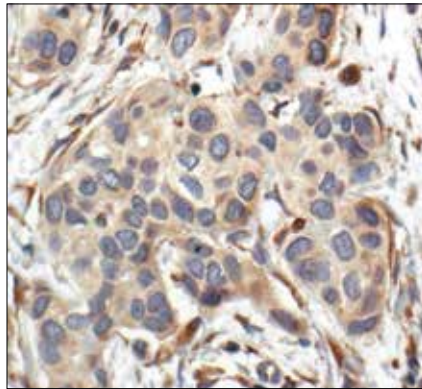
Background: Integrin-linked kinases (ILKs) couple integrins and growth factors to downstream pathways involved in cell survival, cell cycle control, cell-cell adhesion and cell motility (1). ILK functions as a scaffold bridging the extracellular matrix (ECM) and growth factor receptors to the actin cytoskeleton through interactions with integrin, PINCH (which links ILK to the RTKs via Nck2), CH-ILKBP and af-ixin (1). ILK phosphorylates Akt at Ser473, GSK-3 on Ser9, myosin light chain 2 (MLC2) on Ser18/Thr19, as well as af-ixin (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).

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

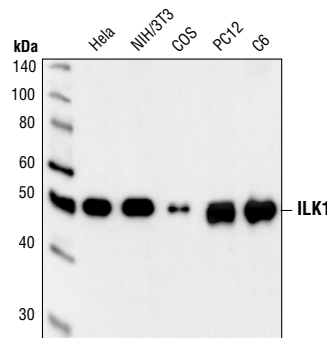
Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the carboxy-terminus of human ILK1. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

- (1) Wu, C. and Dedhar, S. (2000) *J. Biol. Chem.* 155, 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.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma, showing cytoplasmic localization using ILK1 Antibody.



Western blot analysis of extracts from HeLa, NIH/3T3, COS, PC12 and C6 cells using ILK1 Antibody.

Entrez-Gene ID # 3611
Swiss-Prot Acc. # Q13418

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.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western Blotting	1:1000
Immunohistochemistry (Paraffin)	1:100
Unmasking buffer:	Citrate
Antibody diluent:	TBST-5%NGS

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

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

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide

Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine

Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.