

#3856 Store at -20C

ILK1 (4G9) Rabbit mAb



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP, IHC-P	H M R Hm Mk Z B Pg	Endogenous	51	Rabbit IgG	#Q13418	3611

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50
Immunohistochemistry (Paraffin)	1:100 - 1:400

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #53303.

Specificity / Sensitivity

ILK1 (4G9) Rabbit mAb detects endogenous levels of total ILK1 protein. The antibody may cross-react with ILK2.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to the carboxy terminus of human ILK1.

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

- Wu, C. and Dedhar, S. (2000) *J. Biol. Chem.* 275, 505-510.
- Persad, S. et al. (2001) *J. Biol. Chem.* 276, 27462-27469.
- Persad, S. et al. (2000) *J. Cell Biol.* 153, 1161-1173.
- Deng, J.T. et al. (2001) *J. Biol. Chem.* 276, 16365-16373.
- Yamaji, S. et al. (2001) *J. Cell Biol.* 153, 1251-1264.
- 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

WB: Western Blotting **IP:** Immunoprecipitation **IHC-P:** Immunohistochemistry (Paraffin)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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 **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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