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ILK1 Antibody (S259) Blocking Peptide

Synthetic peptide
Catalog # BP7651d

Specification

ILK1 Antibody (S259) Blocking Peptide - Product Information

Primary Accession	Q13418
Other Accession	NP_004508

ILK1 Antibody (S259) Blocking Peptide - Additional Information

Gene ID 3611

Other Names
Integrin-linked protein kinase, 59 kDa serine/threonine-protein kinase, ILK-1, ILK-2, p59ILK, ILK, ILK1, ILK2

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7651d was selected from the S259 region of human ILK1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ILK1 Antibody (S259) Blocking Peptide - 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:8538749, PubMed:9736715).

Cellular Location
Cell junction, focal adhesion. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cell projection, lamellipodium {ECO:0000250|UniProtKB:O55222}. Cytoplasm, myofibril, sarcomere

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

ILK1 Antibody (S259) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

ILK1 Antibody (S259) Blocking Peptide - Images

ILK1 Antibody (S259) Blocking Peptide - Background

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. ILK1 is 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.

ILK1 Antibody (S259) Blocking Peptide - References

Li, Y., et al., J. Clin. Invest. 112(4):503-516 (2003).Troussard, A.A., et al., J. Biol. Chem. 278(25):22374-22378 (2003).Marotta, A., et al., Br. J. Cancer 88(11):1755-1762 (2003).Cordes, N., et al., Br. J. Cancer 88(9):1470-1479 (2003).Fukuda, T., et al., J. Cell Biol. 160(7):1001-1008 (2003).