

**ILK2 Antibody (S214 site specific) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP7077e****Specification**

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**ILK2 Antibody (S214 site specific) Blocking Peptide - Product Information**

Primary Accession [O13418](#)  
Other Accession [NP\\_004508](#)

**ILK2 Antibody (S214 site specific) 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 [AP7077e](/product/products/AP7077e) was selected from the S214 region of human ILK2. 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.

**ILK2 Antibody (S214 site specific) Blocking Peptide - Protein Information**

**Name** ILK ([HGNC:6040](#))

**Function**

Receptor-proximal protein kinase regulating integrin-mediated signal transduction (PubMed:[8538749](http://www.uniprot.org/citations/8538749), PubMed:[9736715](http://www.uniprot.org/citations/9736715)). May act as a mediator of inside-out integrin signaling (PubMed:[10712922](http://www.uniprot.org/citations/10712922)). Focal adhesion protein part of the complex ILK-PINCH (PubMed:[10712922](http://www.uniprot.org/citations/10712922)). This complex is considered to be one of the convergence points of integrin- and growth factor-signaling pathway (PubMed:[10712922](http://www.uniprot.org/citations/10712922)). Could be implicated in mediating cell architecture, adhesion to integrin substrates and

anchorage-dependent growth in epithelial cells (PubMed:<a href="http://www.uniprot.org/citations/10712922" target="\_blank">10712922</a>). Regulates cell motility by forming a complex with PARVB (PubMed:<a href="http://www.uniprot.org/citations/32528174" target="\_blank">32528174</a>). Phosphorylates beta-1 and beta-3 integrin subunit on serine and threonine residues, but also AKT1 and GSK3B (PubMed:<a href="http://www.uniprot.org/citations/8538749" target="\_blank">8538749</a>, PubMed:<a href="http://www.uniprot.org/citations/9736715" target="\_blank">9736715</a>).

#### **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

### **ILK2 Antibody (S214 site specific) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

### **ILK2 Antibody (S214 site specific) Blocking Peptide - Images**

### **ILK2 Antibody (S214 site specific) 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) is an ankyrin repeat containing 51 kDa receptor-proximate serine-threonine kinase (1), with a reported migration rate of 59K. This 451 amino acid protein interacts with the cytoplasmic domain of the beta-1 integrin subunit and contains sequence motifs found in pleckstrin homology domains capable of interacting with phosphoinositide lipids. ILK is an upstream regulator of Pi(3)K dependant activation of protein kinase B (PKB/AKT) and inhibition of glycogen synthase kinase 3 (GSK-3). ILK2 expression is associated with mediation of cell architecture, adhesion to integrin substrates and anchorage-dependent growth in epithelial cells. ILK2 is overexpressed in some highly invasive tumor cell lines.

### **ILK2 Antibody (S214 site specific) 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).