

### ILK2/ILK1 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP7077b

## **Specification**

## ILK2/ILK1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession <u>Q13418</u> Other Accession <u>P57043</u>

# ILK2/ILK1 Antibody (C-term) 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 <a

href=/product/products/AP7077b>AP7077b</a> was selected from the C-term 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/ILK1 Antibody (C-term) Blocking Peptide - Protein Information

#### Name ILK (HGNC:6040)

#### **Function**

Receptor-proximal protein kinase regulating integrin-mediated signal transduction (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>). May act as a mediator of inside-out integrin signaling (PubMed:<a

href="http://www.uniprot.org/citations/10712922" target="\_blank">10712922</a>). Focal adhesion protein part of the complex ILK-PINCH (PubMed:<a

href="http://www.uniprot.org/citations/10712922" target="\_blank">10712922</a>). This complex is considered to be one of the convergence points of integrin- and growth factor-signaling pathway (PubMed:<a href="http://www.uniprot.org/citations/10712922" target="\_blank">10712922</a>). 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:055222}. Cytoplasm, myofibril, sarcomere

#### **Tissue Location**

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

## ILK2/ILK1 Antibody (C-term) Blocking Peptide - Protocols

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

#### • Blocking Peptides

ILK2/ILK1 Antibody (C-term) Blocking Peptide - Images

# ILK2/ILK1 Antibody (C-term) 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.