Phospho-ILK (Thr173) Blocking Peptide – The purity is >90%,tested by HPLC and MS. Purity

PRODUCT OVERVIEW

Product Name	ILK, Blocking Peptide
Full Product Name	Phospho-ILK (Thr173) Blocking Peptide
Product Gene Name	ILK blocking peptide
Product Synonym Names	59kDa serine/threonine protein kinase; 59kDa serine/threonine-protein kinase; DKFZp686F1765; Epididymis secretory protein Li 28; HEL S 28; ILK 1; ILK 2; ILK; ILK-1; ILK-2; ILK_HUMAN; ILK1; ILK2; Integrin linked kinase 2; Integrin linked Kinase; Integrin linked protein kinase; Integrin-linked protein kinase; p59; p59ILK
Form/Format	Synthetic peptide was lyophilized with 100% acetonitrile and is supplied as a powder. Reconstitute with 0.1 ml DI water for a final concentration of 10 mg/ml.
Purity/Purification	The purity is >90%,tested by HPLC and MS.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C.
Antibody/Peptide Pairs	ILK (Thr173) peptide (MBS9616196) is used for blocking the activity of ILK (Thr173) antibody (MBS9612915)
Molecular Weight	51,419 Da
Chromosome Location	Chromosome: 11; NC_000011.9 (6624964..6632101). Location: 11p15.4
OMIM	602366
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Notes	For phospho antibody, we provide phospho peptide (0.5mg) and non-phospho peptide (0.5mg)
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for ILK blocking peptide	Blocking/Control
Related Product Information for ILK blocking peptide	Blocking peptides are peptides that bind specifically to the target antibody and block antibody binding. These peptide usually contains the epitope recognized by the antibody. Antibodies bound to the blocking peptide no longer bind to the epitope on the target protein. This mechanism is useful when non-specific binding is an issue, for example, in Western blotting (immunoblot) and immunohistochemistry (IHC). By comparing the staining from the blocked antibody versus the antibody alone, one can see which staining is specific; Specific binding will be absent from the western blot or immunostaining performed with the neutralized antibody.
Other Notes	Small volumes of ILK blocking peptide vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for ILK purchase	MBS9616196 is a blocking peptide targeting ILK. Also known as Phospho-ILK (Thr173) Blocking Peptide.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for ILK. It may not necessarily be applicable to this product.

NCBI GI #	62420873
NCBI GeneID	3611
NCBI Accession #	NP_001014794.1

UniProt Primary Accession #	Q13418
UniProt Secondary Accession #	P57043; Q68DZ3; D3DQU0
UniProt Related Accession #	Q13418
GenBank Nucleotide #	NM_001014794.2
NCBI Official Full Name	integrin-linked protein kinase isoform 1
NCBI Official Synonym Full Names	integrin-linked kinase
NCBI Official Symbol	ILK
NCBI Official Synonym Symbols	P59; ILK-1; ILK-2; p59ILK
UniProt Protein Name	Integrin-linked protein kinase
UniProt Synonym Protein Names	59 kDa serine/threonine-protein kinase; ILK-1; ILK-2; p59ILK
Protein Family	Integrin-linked protein kinase
UniProt Gene Name	ILK
UniProt Synonym Gene Names	ILK1; ILK2
UniProt Entry Name	ILK_HUMAN
NCBI Protein Information	integrin-linked protein kinase; integrin-linked kinase-2; 59 kDa serine/threonine-protein kinase
NCBI Summary for ILK	This gene encodes a protein with a kinase-like domain and four ankyrin-like repeats. The encoded protein associates at the cell membrane with the cytoplasmic domain of beta integrins, where it regulates integrin-mediated signal transduction. Activity of this protein is important in the epithelial to mesenchymal transition, and over-expression of this gene is implicated in tumor growth and metastasis. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2013]

UniProt Comments for ILK	ILK: a tyrosine kinase-like kinase of the MLK family. Couples integrins and growth factors to downstream pathways involved in cell survival, cell cycle control, cell-cell adhesion and cell motility. Functions as a scaffold bridging the extra-cellular matrix and growth factor receptors to the actin cytoskeleton through interactions with the ILK-PINCH complex. This complex, which includes integrin, PINCH (which links ILK to receptor tyrosine kinases via Nck2), PARVA and affixin, is considered to be one of the convergence points of integrin- and growth factor-signaling pathways. May be implicated in mediating cell architecture, adhesion to integrin substrates and anchorage-dependent growth in epithelial cells. Stimulated downstream of PI3 kinase. Increased expression is correlated with progression of several tumor types, including breast, prostate, and colon carcinomas. Overexpression drives anchorage-independent growth and faster cell cycle. Protein type: EC 2.7.11.1; Kinase, protein; Protein kinase, TKL; Protein kinase, Ser/Thr (non-receptor); TKL group; MLK family; ILK subfamily Chromosomal Location of Human Ortholog: 11p15.4 Cellular Component: protein complex; costamere; focal adhesion; terminal button; intercellular junction; cytosol; nucleoplasm; sarcomere; membrane; cell soma; lamellipodium; cytoplasm; plasma membrane; stress fiber; dendritic shaft; cell junction Molecular Function: integrin binding; protein serine/threonine kinase activity; protein binding; signal transducer activity; SH3 domain binding; protein kinase binding; ATP binding Biological Process: negative regulation of smooth muscle cell proliferation; protein heterooligomerization; cell-matrix adhesion; positive regulation of axon extension; positive regulation of transcription, DNA-dependent; negative regulation of smooth muscle cell migration; protein amino acid phosphorylation; myelin formation; positive regulation of MAP kinase activity; positive regulation of cell proliferation; fibril organization and biogenesis; protein kinase B signaling cascade; negative regulation of neuron apoptosis; cell cycle arrest; positive regulation of cell-matrix adhesion; positive regulation of BMP signaling pathway; integrin-mediated signaling pathway; cell aging; positive regulation of dendrite morphogenesis; positive regulation of myoblast differentiation; myelination in the peripheral nervous system; establishment and/or maintenance of epithelial cell polarity; cell proliferation; positive regulation of osteoblast differentiation; positive regulation of protein kinase B signaling cascade; peptidyl-serine phosphorylation; ureteric bud branching; regulation of actin cytoskeleton organization and biogenesis; negative regulation of protein kinase activity; nerve development; positive regulation of phosphorylation; neurite morphogenesis; positive regulation of cell migration
Research Articles on ILK	**1.** study suggested that positive ILK and PRDX1 expressions are closely related to the progression and poor prognosis of gallbladder cancer
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