

Rabbit Anti-phospho-ILK-1 (Ser259) antibody

SL5445R

Product Name:	phospho-ILK-1 (Ser259)
Chinese Name:	磷酸化整合素连接激酶1抗体
Alias:	ILK-1 (phospho S259); ILK-1 (phospho Ser259); p-ILK-1 (Ser259); 59 kDa serine/threonine protein kinase; 59 kDa serine/threonine-protein kinase; ILK-2; ILK_HUMAN; Integrin linked Kinase; Integrin-linked protein kinase; DKFZp686F1765; EC 2.7.11.1; ILK 1; ILK 2; ILK; ILK1; ILK2; Integrin linked Kinase 2; Integrin linked protein kinase; p59; p59ILK.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Chicken, Dog, Pig, Cow, Horse, Rabbit, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	50kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human ILK-1 around the phosphorylation site of Ser259:CQ(p-S)PP
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	The ILK protein is important in different biological pathways such as cell adhesion,

anchorage-dependent cell cycle progression, oncogenic transformation, and growth factor signaling. The kinase activity of ILK is low in non-activated cells; its activity is stimulated by cell-ECM interactions and by certain growth factors. 3 Negative regulation of ILK is mediated by two phosphatases: PTEN, a tumor suppressor lipid sphatase, and ILKAP, a PP2C protein phosphatase. In tumor cells that do not express PTEN protein, ILK is constitutively active.

Function:

Receptor-proximal protein kinase regulating integrin-mediated signal transduction. May act as a mediator of inside-out integrin signaling. Focal adhesion protein part of the complex ILK-PINCH. This complex is considered to be one of the convergence points of integrin- and growth factor-signaling pathway. Could be implicated in mediating cell architecture, adhesion to integrin substrates and anchorage-dependent growth in epithelial cells. Phosphorylates beta-1 and beta-3 integrin subunit on serine and threonine residues, but also AKT1 and GSK3B.

Subunit:

Interacts with cytoplasmic domain of beta 1 subunit of integrin. Could also interacts with beta 2, beta 3 and/or beta 5 subunit of integrin. Interacts (via ANK repeats) with LIMS1 and LIMS2. Interacts with parvins and probably TGFB1I1. Interacts (via ANK repeats) with EPHA1 (via SAM domain); stimulated by EFNA1 but independent of the kinase activity of EPHA1.

Subcellular Location:

Cell junction, focal adhesion. Cell membrane; Peripheral membrane protein; Cytoplasmic side.

Tissue Specificity:

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

Post-translational modifications:

Autophosphorylated on serine residues.

Similarity:

Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family. Contains 5 ANK repeats.

Contains 1 protein kinase domain.

SWISS:

Q13418

Gene ID:

3611

Database links:

Entrez Gene: 3611Human

Entrez Gene: 16202Mouse

Entrez Gene: 170922Rat

Omim: 602366Human

SwissProt: Q13418Human

SwissProt: O55222Mouse

SwissProt: Q99J82Rat

<u>Unigene: 5158</u>Human

Unigene: 706355Human

Unigene: 274846Mouse

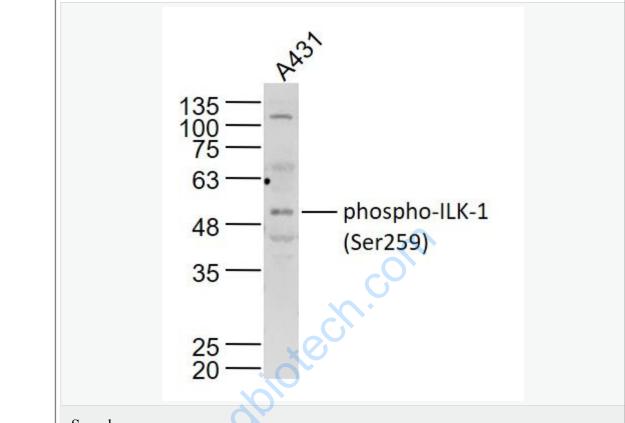
Unigene: 95042Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

ILK

是一种新发现的Ser/Thr蛋白激酶。ILK能够通过与整合素β1亚单位的结合介导细胞与胞外基质的连接,以依赖于PI3K的方式激活,并通过磷酸化下游底物PKB/AKT,GSK3等胞外信号的一项下游传递,对细胞的生长,分化,迁移等进行调控。由于ILK在胞内外信号传导中起着重要的作用。并且抑制ILK的活性能够导致细胞周期的停滞和细胞程序性死亡的启动,使其成为Tumour治疗和Tumour药物的理想靶位点



Picture:

Sample:

A431(Human) Cell Lysate at 30 ug

Primary: Anti-phospho-ILK-1 (Ser259) (SL5445R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 50 kD

Observed band size: 50 kD