

Phospho-ILK(S343) Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3679a

Specification

Phospho-ILK(\$343) Antibody - Product Information

Application DB,E
Primary Accession Q13418

Other Accession <u>Q99182</u>, <u>Q55222</u>, <u>Q3SWY2</u>, <u>Q9DF58</u>

Reactivity Human

Predicted Bovine, Chicken, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG

Phospho-ILK(S343) Antibody - 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

This ILK Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S343 of human ILK.

Dilution

DB~~1:500

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Phospho-ILK(S343) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Phospho-ILK(S343) Antibody - Protein Information

Name ILK (HGNC:6040)

Function Receptor-proximal protein kinase regulating integrin-mediated signal transduction (PubMed: <u>8538749</u>, PubMed: <u>9736715</u>). May act as a mediator of inside-out integrin signaling



(PubMed:<u>10712922</u>). Focal adhesion protein part of the complex ILK-PINCH (PubMed:<u>10712922</u>). This complex is considered to be one of the convergence points of integrin- and growth factor-signaling pathway (PubMed:<u>10712922</u>). Could be implicated in mediating cell architecture, adhesion to integrin substrates and anchorage-dependent growth in epithelial cells (PubMed:<u>10712922</u>). Regulates cell motility by forming a complex with PARVB (PubMed:<u>32528174</u>). Phosphorylates beta-1 and beta-3 integrin subunit on serine and threonine residues, but also AKT1 and GSK3B (PubMed:<u>8538749</u>, PubMed:<u>9736715</u>).

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

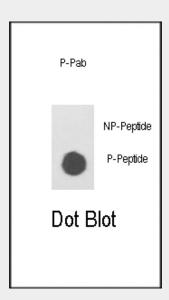
Highly expressed in heart followed by skeletal muscle, pancreas and kidney. Weakly expressed in placenta, lung and liver

Phospho-ILK(\$343) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Phospho-ILK(\$343) Antibody - Images



Dot blot analysis of anti-Phospho ILK-S343 Pab (Cat. #AP3679a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

Phospho-ILK(\$343) Antibody - Background





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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. ILK 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.

Phospho-ILK(\$343) Antibody - 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). Phospho-ILK(S343) Antibody - Citations

- β1-integrin restricts astrocytic differentiation of adult hippocampal neural stem cells.
- Nanofiber-mediated inhibition of focal adhesion kinase sensitizes glioma stemlike cells to epidermal growth factor receptor inhibition.