# abcam

## Product datasheet

## Anti-Integrin linked ILK antibody [EP1593Y] ab52480





## **18 References** 10 Images

#### Overview

**Product name** Anti-Integrin linked ILK antibody [EP1593Y]

Rabbit monoclonal [EP1593Y] to Integrin linked ILK **Description** 

**Host species** Rabbit

**Specificity** This antibody reacts with Integrin linked ILK. The mouse and rat recommendation is based on the

WB results. We do not guarantee IHC-P for mouse and rat.

**Tested applications** Suitable for: WB, IP, IHC-P

Unsuitable for: Flow Cyt or ICC/IF

Species reactivity Reacts with: Rat, Human, African green monkey

Predicted to work with: Mouse, Cow

Synthetic peptide within Human Integrin linked ILK aa 400 to the C-terminus. The exact sequence **Immunogen** 

is proprietary.

Database link: Q13418

Positive control Human heart muscle tissue and COS cell lysate

**General notes** This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

### **Properties**

**Form** Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

Purity Protein A purified

Clonality Monoclonal
Clone number EP1593Y

**Isotype** IgG

## **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab52480 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000. Detects a band of approximately 51 kDa (predicted molecular weight: 51 kDa).  For unpurified use at 1/2000 - 1/10000 dilution.
IP		1/40. For unpurified use at 1/30 dilution.
IHC-P		1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.  See IHC antigen retrieval protocols.  The mouse and rat recommendation is based on the WB results.  We do not guarantee IHC-P for mouse and rat.

**Application notes** Is unsuitable for Flow Cyt or ICC/IF.

T	a	r	a	et

**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-

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.

**Tissue specificity** Highly expressed in heart followed by skeletal muscle, pancreas and kidney. Weakly expressed in

placenta, lung and liver.

Sequence similarities Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family.

Contains 5 ANK repeats.

Contains 1 protein kinase domain.

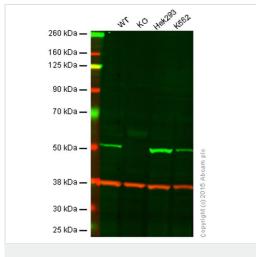
**Domain** A PH-like domain is involved in phosphatidylinositol phosphate binding.

Post-translational modifications

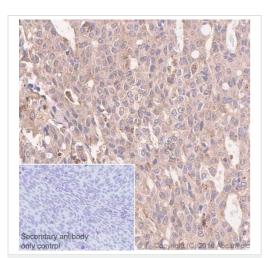
Autophosphorylated on serine residues.

**Cellular localization** Cell junction > focal adhesion. Cell membrane.

#### **Images**



Western blot - Anti-Integrin linked ILK antibody [EP1593Y] (ab52480)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Integrin linked ILK antibody [EP1593Y] (ab52480)

Lane 1: Wild-type HAP1 cell lysate (20 µg)

Lane 2: Integrin linked ILK knockout HAP1 cell lysate (20 µg)

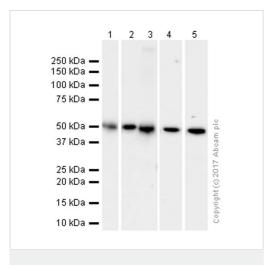
Lane 3: HEK293 cell lysate (20 µg)

Lane 4: K562 cell lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - ab52480 observed at 52 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

Unpurified ab52480 was shown to specifically react with Integrin linked ILK when Integrin linked ILK knockout samples were used. Wild-type and Integrin linked ILK knockout samples were subjected to SDS-PAGE. Unpurified ab52480 and ab8245 (loading control to GAPDH) were both diluted 1/2000 and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human lung cancer tissue sections labeling Integrin linked ILK with Purified ab52480 at 1/100 dilution (7.13 µg/ml). Heat mediated antigen retrieval was performed using citrate (pH 6.0).



Western blot - Anti-Integrin linked ILK antibody [EP1593Y] (ab52480)

**All lanes :** Anti-Integrin linked ILK antibody [EP1593Y] (ab52480) at 1/1000 dilution (Purified)

**Lane 1 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates with 5% NFDM/TBST

**Lane 2**: K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysates with 5% NFDM/TBST

Lane 3: Mouse heart lysates with 5% NFDM/TBST

**Lane 4 :** HEK-293 (Human embryonic kidney epithelial cell) whole cell lysates with 5% NFDM/TBST

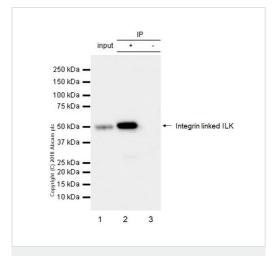
**Lane 5**: PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysates with 5% NFDM/TBST

Lysates/proteins at 20 µg per lane.

## **Secondary**

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

Predicted band size: 51 kDa Observed band size: 51 kDa



Immunoprecipitation - Anti-Integrin linked ILK antibody [EP1593Y] (ab52480)

ab52480 (purified) at 1:40 dilution (2µg) immunoprecipitating Integrin linked ILK in HeLa whole cell lysate.

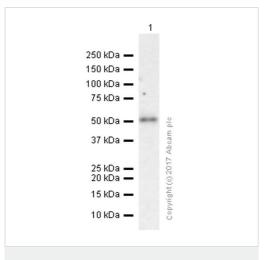
Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10µg

Lane 2 (+): ab52480 & HeLa whole cell lysate

**Lane 3 (-):** Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab52480 in HeLa whole cell lysate

For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.



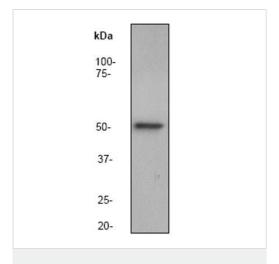
Western blot - Anti-Integrin linked ILK antibody [EP1593Y] (ab52480)

Anti-Integrin linked ILK antibody [EP1593Y] (ab52480) at 1/1000 dilution (Purified) + COS-1 (African green monkey kidney fibroblast-like) whole cell lysates at 15 µg with 5% NFDM/TBST

## **Secondary**

Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution (Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated)

**Predicted band size:** 51 kDa **Observed band size:** 51 kDa



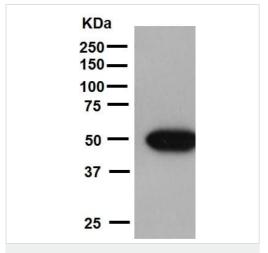
Western blot - Anti-Integrin linked ILK antibody [EP1593Y] (ab52480)

Anti-Integrin linked ILK antibody [EP1593Y] (ab52480) at 1/2000 dilution (unpurified) + COS-1 (African green monkey kidney fibroblast-like) cell lysate at 10 µg

## **Secondary**

Goat anti-rabbit HRP labeled at 1/2000 dilution

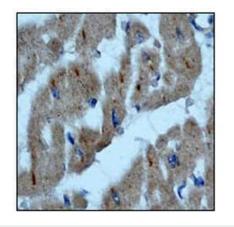
**Predicted band size:** 51 kDa **Observed band size:** 51 kDa



Western blot - Anti-Integrin linked ILK antibody [EP1593Y] (ab52480)

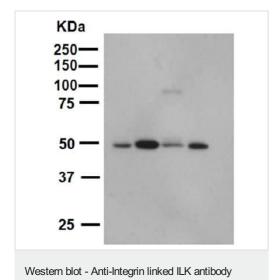
Anti-Integrin linked ILK antibody [EP1593Y] (ab52480) (unpurified) + PC12

Predicted band size: 51 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Integrin linked ILK antibody [EP1593Y] (ab52480)

Immunohistochemical analysis of paraffin-embedded human heart muscle using unpurified ab52480 at a 1/50 dilution.



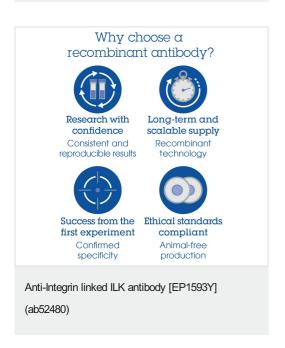
[EP1593Y] (ab52480)

**All lanes :** Anti-Integrin linked ILK antibody [EP1593Y] (ab52480) at 1/2000 dilution (unpurified)

Lane 1 : Rat Brain
Lane 2 : Rat Heart
Lane 3 : Rat Kidney
Lane 4 : Rat Spleen

Predicted band size: 51 kDa

Exposure time: 3 minutes



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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