abcam

Product datasheet

Anti-DYNLL1/PIN antibody [EP1660Y] ab51603

敲除验证 重组 RabMAb

★★★★★ 7 Abreviews 35 References 12 图像

概述

产品名称	Anti-DYNLL1/PIN抗体[EP1660Y]
描述	兔单克隆抗体[EP1660Y] to DYNLL1/PIN
宿主	Rabbit
特异性	ab51603 recognizes DLC8. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
经测试应用	**适用于:** Flow Cyt (Intra), WB, IHC-P, IP, ICC/IF
种属反应性	**与反应:** Mouse, Rat, Human **预测可用于:** Drosophila melanogaster
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
表位	The epitope for this antibody is on the N-terminus, AA2-14.
阳性对照	WB: HeLa cell lysate; Mouse testis tissue lysate. IHC-P: Human liver tissue. Flow Cyt (intra): HeLa cells.
常规说明	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**.

性能

形式	Liquid
存放说明	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. Stable for 12 months at -20°C.
存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.21% BSA

纯度	Protein A purified
克隆	单克隆
克隆编号	EP1660Y
同种型	IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab51603于以下的经测试应用

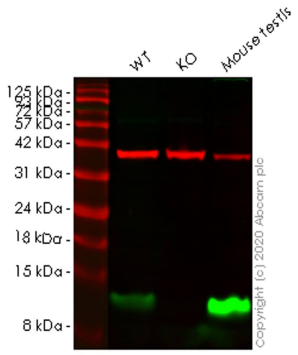
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/2300.
WB	★★★★★ (6)	1/1000 - 1/10000. Detects a band of approximately 10 kDa (predicted molecular weight: 10 kDa).
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
IP		1/30. **For unpurified use at 1/100.**
ICC/IF	★★★★☆ (1)	1/100 - 1/250.

靶标

功能	Acts as one of several non-catalytic accessory components of the cytoplasmic dynein 1 complex that are thought to be involved in linking dynein to cargos and to adapter proteins that regulate dynein function. Cytoplasmic dynein 1 acts as a motor for the intracellular retrograde motility of vesicles and organelles along microtubules. May play a role in changing or maintaining the spatial distribution of cytoskeletal structures. Binds and inhibits the catalytic activity of neuronal nitric oxide synthase. Promotes transactivation functions of ESR1 and plays a role in the nuclear localization of ESR1. Regulates apoptotic activities of BCL2L11 by sequestering it to microtubules. Upon apoptotic stimuli the BCL2L11-DYNLL1 complex dissociates from cytoplasmic dynein and translocates to mitochondria and sequesters BCL2 thus neutralizing its antiapoptotic activity.
组织特异性	Ubiquitous.
序列相似性	Belongs to the dynein light chain family.
翻译后修饰	Phosphorylation at Ser-88 appears to control the dimer-monomer transition. According to PubMed:15193260, it is phosphorylated at Ser-88 by PAK1, however, according to PubMed:18650427, the DYNLL1 dimer is not accessible for PAK1 and the phosphorylation could not be demonstrated in vitro.
细胞定位	Cytoplasm, cytoskeleton. Nucleus. Mitochondrion. Upon induction of apoptosis translocates together with BCL2L11 to mitochondria.

图片



Western blot - Anti-DYNLL1/PIN antibody [EP1660Y] (ab51603)

All lanes : Anti-DYNLL1/PIN antibody [EP1660Y] (ab51603) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate
Lane 2 : DYNLL1 knockout HeLa cell lysate
Lane 3 : Mouse testis tissue lysate

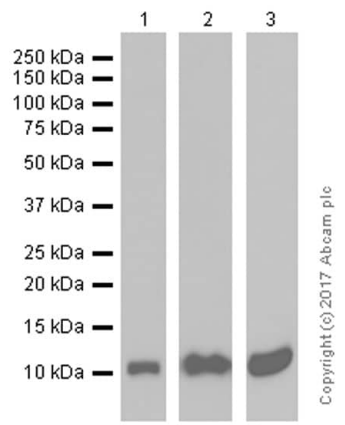
Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) at 1/10000 dilution

Predicted band size: 10 kDa
Observed band size: 10 kDa

Lanes 1-3: Merged signal (red and green). Green - ab51603 observed at 10 kDa. Red - loading control **ab8245** observed at 36 kDa.

ab51603 Anti-DYNLL1/PIN antibody [EP1660Y] was shown to specifically react with DYNLL1/PIN in wild-type HeLa cells. Loss of signal was observed when knockout cell line **ab265265** (knockout cell lysate **ab257414**) was used. Wild-type and DYNLL1/PIN knockout samples were subjected to SDS-PAGE. ab51603 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. 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 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-DYNLL1/PIN antibody [EP1660Y] (ab51603)

All lanes : Anti-DYNLL1/PIN antibody [EP1660Y] (ab51603) at 1/10000 dilution (purified)

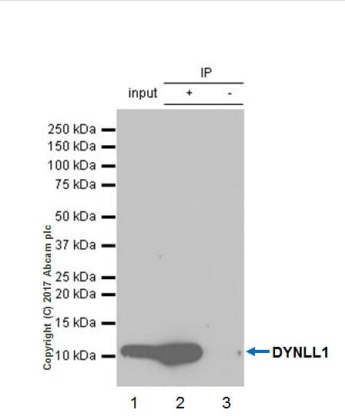
Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2 : Mouse testis lysates
Lane 3 : Rat testis lysates

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 10 kDa
Observed band size: 10 kDa

Blocking and diluting buffer: 5% NFDM/TBST

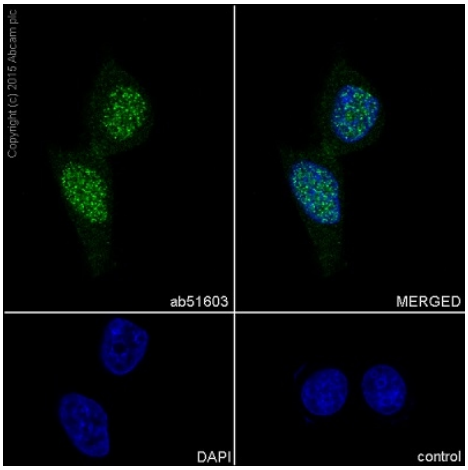


Immunoprecipitation - Anti-DYNLL1/PIN antibody [EP1660Y] (ab51603)

ab51603 (purified) at 1:30 dilution (2ug) immunoprecipitating DYNLL1/PIN in HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate.

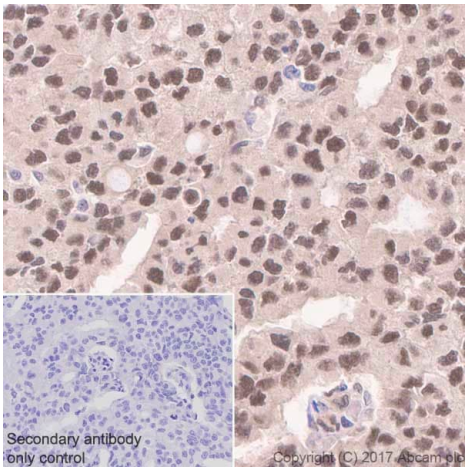
Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10ug
Lane 2 (+): ab51603 & HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab51603 in HeLa (Human cervix adenocarcinoma epithelial cell) 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.



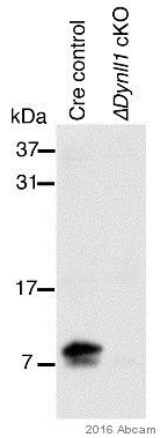
Immunocytochemistry/ Immunofluorescence - Anti-DYNLL1/PIN antibody [EP1660Y] (ab51603)

Immunocytochemistry/ Immunofluorescence analysis of MCF7 (Human breast adenocarcinoma epithelial cell) cells labeling DYNLL1/PIN with Purified ab51603 at 1:100 dilution (6.7µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. **ab150077** Goat anti rabbit IgG(Alexa Fluor® 488) was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DYNLL1/PIN antibody [EP1660Y] (ab51603)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human breast carcinoma tissue sections labeling DYNLL1/PIN with Purified ab51603 at 1:500 dilution (1.34 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Western blot - Anti-DYNLL1/PIN antibody [EP1660Y] (ab51603)

This image is courtesy of an abreview submitted by Dr. Jörg Heierhorst

All lanes : Anti-DYNLL1/PIN antibody [EP1660Y] (ab51603) at 1/5000 dilution (unpurified)

Lane 1 : Primary mouse Mb1-Cre control Eμ-Myc B cell lymphoma (lysate of whole lymphnode)
Lane 2 : Primary mouse Mb1-Cre DYNLL1/PIN-conditional knockout Eμ-Myc B cell lymphoma (lysate of whole lymphnode)

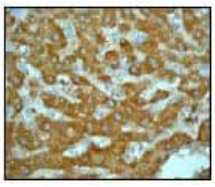
Secondary
All lanes : HRP conjugated polyclonal goat IgG at 1/5000 dilution

Performed under reducing conditions.

Predicted band size: 10 kDa
Observed band size: 10 kDa

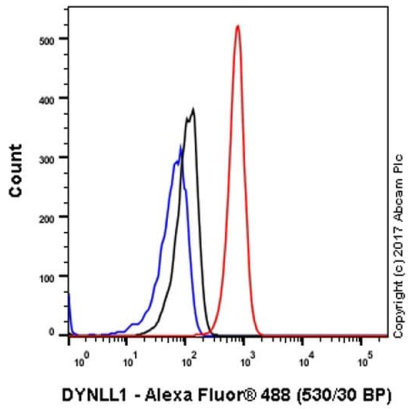
Exposure time: 10 minutes

Lymphnodes were dissociated in PBS 2% FBS. Cell suspensions filtered through 70 µm and 40 µm cell strainers, and 300 x g pellets were lysed in modified RIPA buffer (150 mM NaCl, 20 mM Tris pH7.4, 1 mM EDTA, 1 mM EGTA, 10 mM NaF, 1% Triton X-100, 1% sodium deoxycholate, 0.1% SDS, 1 mM PMSF, 1 x protein inhibitor cocktail (Sigma)).



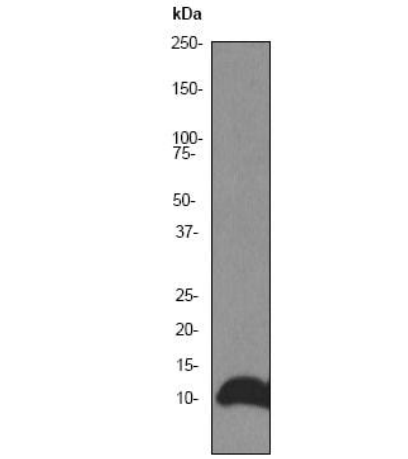
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DYNLL1/PIN antibody [EP1660Y] (ab51603)

Immunohistochemical staining of paraffin embedded human liver using unpurified ab51603 (1/100).



Flow Cytometry (Intracellular) - Anti-DYNLL1/PIN antibody [EP1660Y] (ab51603)

Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling DYNLL1/PIN (red) with purified ab51603 at a 1/2300 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. A goat anti-rabbit IgG (Alexa Fluorr® 488) (**ab150077**) was used as the secondary antibody at a 1/2000 dilution. Black - Rabbit monoclonal IgG (**ab172730**). Blue (unlabeled control) - Cells without incubation with the primary and secondary antibodies.



Western blot - Anti-DYNLL1/PIN antibody [EP1660Y] (ab51603)

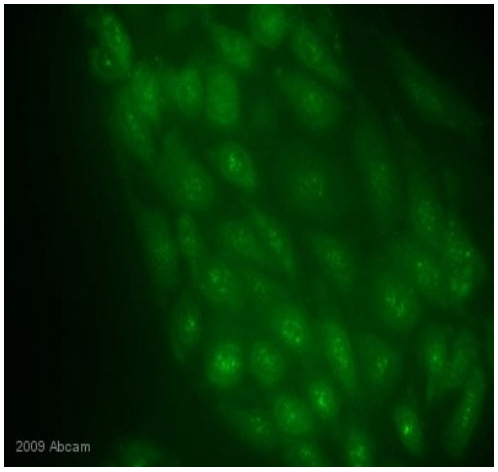
Anti-DYNLL1/PIN antibody [EP1660Y] (ab51603) at 1/10000 dilution (unpurified) + HeLa cell lysate at 10 µg

Secondary

Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 10 kDa

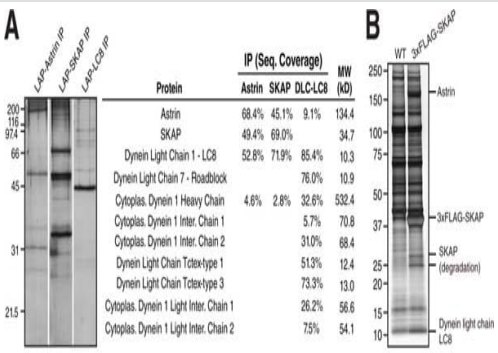
Observed band size: 10 kDa



Immunocytochemistry/ Immunofluorescence - Anti-DYNLL1/PIN antibody [EP1660Y] (ab51603)

This image is courtesy of an anonymous Abreview

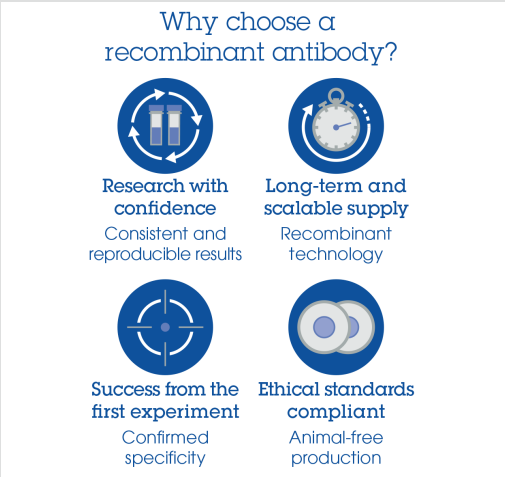
Unpurified ab51603 staining DLC8 in mouse kidney cells cells by ICC/IF (immunocytochemistry/immunofluorescence. Cells were fixed with methanol, permeabilized with 0.1% Triton and blocked with 1% milk for 1 hour at room temperature. The sample was incubated with primary antibody (1/400; 1% milk in PBS) for 16 hours at 4°C. An Alexa Fluor®488-conjugated Goat polyclonal to rabbit IgG (1/1000) was used as secondary antibody.



Immunoprecipitation - Anti-DYNLL1/PIN antibody [EP1660Y] (ab51603)

Image from Schmidt JC et al, J Cell Biol. 2010 Oct 18;191(2):269-80. Epub 2010 Oct 11, Fig 2. DOI 10.1083/jcb.201006129

Unpurified ab51603 used in IP.SKAP and Astrin form a complex. (A, left) Silver-stained gels showing a one-step IP of GFPLAP-Astrin, GFPLAP-SKAP, or GFPLAP-LC8. (A, right) Data from the mass spectrometric analysis of the purifications indicating the percent sequence coverage from each IP. (B) Silver-stained gel showing the purification of FLAG-SKAP from chicken DT40 cells relative to controls. The indicated proteins were identified by excising them from a gel and analyzing them by mass spectrometry.



Anti-DYNLL1/PIN antibody [EP1660Y] (ab51603)

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