abcam

ab232343

Anti-DYNLL1/PIN antibody [EP1660Y] - BSA and Azide free

Recombinant | RabMAb | KO Validated

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EP1660Y
Purification technique	Affinity purification Protein A
Specificity	ab51603 recognizes DLC8.
Epitope	The epitope for this antibody is on the N-terminus, AA2-14.
Concentration	1.068 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Rat, Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Rat, Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Rat, Mouse
Dilution info	Use at an assay dependent concentration.

Notes	-

IHC-P

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Rat, Mouse, Human
Dilution info	-
Notes	-

Target data

See full target information DYNLL1

Function

Component of dynein, a family of motor proteins essential for movement along microtubules (By similarity). Required for structural and functional integrity of cilia (By similarity). 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 (By similarity). Cytoplasmic dynein 1 acts as a motor for the intracellular retrograde motility of vesicles and organelles along microtubules (By similarity). May play a role in changing or maintaining the spatial distribution of cytoskeletal structures (By similarity). In addition to its role in cytoskeleton and transport, acts as a protein-protein adapter, which inhibits and/or sequesters target proteins (PubMed:10198631, PubMed:15193260, PubMed:15891768, PubMed:16684779, PubMed:30464262, PubMed:37696958). Involved in the response to DNA damage by acting as a key regulator of DNA end resection: when phosphorylated at Ser-88, recruited to DNA double-strand breaks (DSBs) by TP53BP1 and acts by disrupting

MRE11 dimerization, thereby inhibiting DNA end resection (PubMed:30464262, PubMed:37696958). In a subset of DSBs, DYNLL1 remains unphosphorylated and promotes the recruitment of the Shieldin complex (PubMed:37696958). Binds and inhibits the catalytic activity of neuronal nitric oxide synthase/NOS1 (By similarity). Promotes transactivation functions of ESR1 and plays a role in the nuclear localization of ESR1 (PubMed:15891768, PubMed:16684779). Regulates apoptotic activities of BCL2L11 by sequestering it to microtubules (PubMed:10198631, PubMed:15193260). Upon apoptotic stimuli the BCL2L11-DYNLL1 complex dissociates from cytoplasmic dynein and translocates to mitochondria and sequesters BCL2 thus neutralizing its antiapoptotic activity (PubMed:10198631, PubMed:15193260).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab232343 is the carrier-free version of ab51603.

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

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

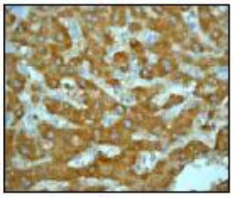
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

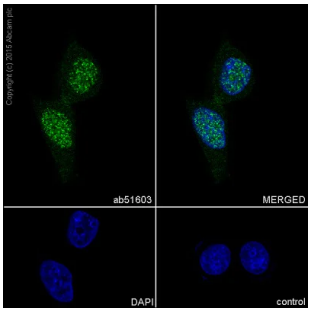
7 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DYNLL1/PIN antibody [EP1660Y] - BSA and Azide free (ab232343)

DYNLL1/PIN Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-DYNLL1/PIN antibody

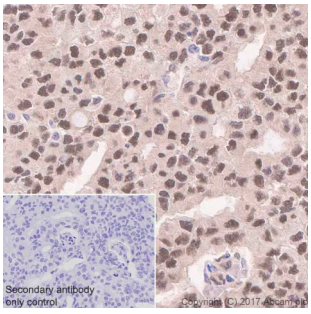
Immunohistochemical staining of paraffin embedded human liver using unpurified ab51603 (1/100).
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab51603).



Immunocytochemistry/ Immunofluorescence - Anti-DYNLL1/PIN antibody [EP1660Y] - BSA and Azide free (ab232343)

DYNLL1/PIN Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-DYNLL1/PIN antibody

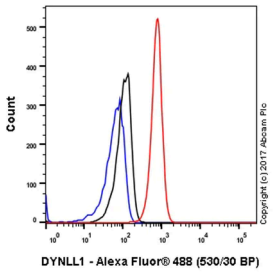
Immunocytochemistry/ Immunofluorescence analysis of MCF7 (Human breast adenocarcinoma epithelial cell) cells labeling DYNLL1 with Purified ab51603 at 1:100 dilution (6.7µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. ab150077 Goat anti rabbit IgG(Alexa Fluor® 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.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab51603).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DYNLL1/PIN antibody [EP1660Y] - BSA and Azide free (ab232343)

DYNLL1/PIN Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-DYNLL1/PIN antibody

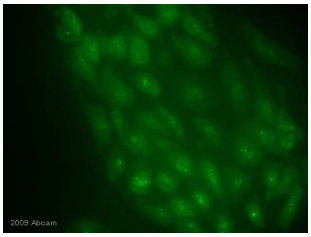
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human breast carcinoma tissue sections labeling DYNLL1 with Purified ab51603 at 1:500 dilution (1.34 µg/ml). Heat mediated antigen retrieval was performed using ab93684 (Tris/EDTA buffer, pH 9.0). Tissue was counterstained 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.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab51603).



Flow Cytometry (Intracellular) - Anti-DYNLL1/PIN antibody [EP1660Y] - BSA and Azide free (ab232343)

DYNLL1/PIN Flow Cytometry (Intracellular) staining using rabbit Anti-DYNLL1/PIN antibody

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 Fluor® 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.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab51603).

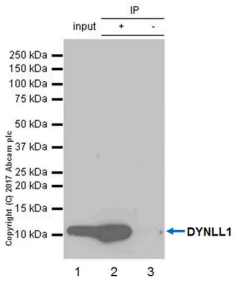


Immunocytochemistry/ Immunofluorescence - Anti-DYNLL1/PIN antibody [EP1660Y] - BSA and Azide free (ab232343)

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

This image is courtesy of an anonymous customer review.

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.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab51603).



Immunoprecipitation - Anti-DYNLL1/PIN antibody [EP1660Y] - BSA and Azide free (ab232343)

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.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab51603).

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

Predicted band size: 10 kDa

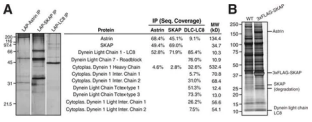


Image from Schmidt JC et al. J Cell Biol. 2010 Oct 18;191(2):269-80. Epub 2010 Oct 11 Fig 2. DOI 10.1083/jcb.201006129.

Immunoprecipitation - Anti-DYNLL1/PIN antibody [EP1660Y] - BSA and Azide free (ab232343)

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.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab51603).

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

Predicted band size: 10 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.