abcam

ab109752

Anti-p50 dynamitin antibody [EPR5094]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR5094
Purification technique	Affinity purification Protein A
Concentration	0.11 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/10000 - 1/50000
Notes	-

Expected

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

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/10 - 1/100
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information DCTN2

Function	Part of the dynactin complex that activates the molecular motor dynein for ultra-processive transport along microtubules. In the dynactin soulder domain, binds the ACTR1A filament and acts as a molecular ruler to determine the length (By similarity). Modulates cytoplasmic dynein binding to an organelle, and plays a role in prometaphase chromosome alignment and spindle organization during mitosis. Involved in anchoring microtubules to centrosomes. May play a role in synapse formation during brain development (By similarity).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Storage information	Stable for 12 months at -20°C

Notes

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.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	P50 dynamitin also known as DCTN2 or dynactin subunit 2 is a protein component of the dynactin complex with a molecular mass of approximately 50 kDa. This protein is expressed in various tissues where it plays an important role in intracellular transport mechanisms. p50 dynamitin is essential for the proper functioning of the dynein-dynactin motor protein complex which is important for the transport of organelles and vesicles along microtubules within cells.

Biological function summary	P50 dynamitin serves as a regulator within the dynactin complex ensuring its structural integrity and facilitating interaction with dynein motor proteins. It is part of the larger dynactin complex which consists of over 20 subunits. p50 dynamitin's role in this complex directly impacts cytoplasmic and nuclear activities including the trafficking of endosomes lysosomes and other cargo within cells. The proper functioning of this complex is necessary for maintaining the correct intracellular transport which affects various cellular processes.
Pathways	P50 dynamitin is involved in the cytoskeletal network through its interaction with the dynein motor protein pathway and is closely related to microtubule dynamics. Dynactin of which p50 is a part functions with dynein to mediate minus-end-directed movement along microtubules necessary for processes such as mitotic spindle formation and chromosome alignment. This relationship with dynein highlights its role in cell division and intracellular transport impacting neurological pathway regulation.
Associated diseases and disorders	P50 dynamitin has been linked to neurological disorders like motor neuron disease and amyotrophic lateral sclerosis (ALS). The dysfunction of the dynactin-dynein complex where p50 dynamitin plays a regulatory role can lead to disrupted neuronal transport processes contributing to these diseases. Additionally its association with the protein TDP-43 points to a connection with neurodegenerative conditions further illustrating its clinical significance in the pathology of ALS and related disorders.

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

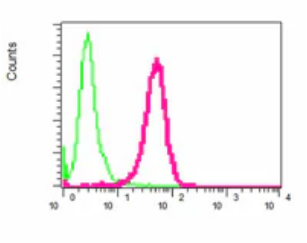
We do not recommend this combination. It is not covered by our product promise.

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.

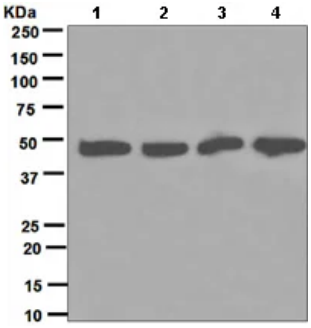
2 product images



Flow Cytometry (Intracellular) - Anti-p50 dynamitin antibody [EPR5094] (ab109752)

P50 dynamitin Flow Cytometry (Intracellular) staining using rabbit Anti-p50 dynamitin antibody

ab109752 at 1/10 dilution staining p50 dynamitin in Saos2 cells by intracellular flow cytometry (red) or a rabbit IgG (negative) (green).



Western blot - Anti-p50 dynamitin antibody [EPR5094] (ab109752)

All lanes:
Western blot - Anti-p50 dynamitin antibody [EPR5094] (ab109752) at 1/10000 dilution

Lane 1:
MCF7 cell lysate at 10 µg

Lane 2:
A375 cell lysate at 10 µg

Lane 3:
Saos2 cell lysate at 10 µg

Lane 4:
SH SY5Y cell lysate at 10 µg

Predicted band size: 44 kDa

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