abcam

Product datasheet

Anti-Cytoplasmic Dynein Intermediate chain antibody [74.1] ab23905

Recombinant



* ★ ★ ★ ★ ★ 6 Abreviews 35 References 7 Images

Overview

Product name Anti-Cytoplasmic Dynein Intermediate chain antibody [74.1]

Description Mouse monoclonal [74.1] to Cytoplasmic Dynein Intermediate chain

Host species Mouse

Tested applications Suitable for: Flow Cyt, IP, WB

Unsuitable for: ICC

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Full length native protein (purified) corresponding to Cow Cytoplasmic Dynein Intermediate chain.

Positive control WB: U-87 MG, SH-SY5Y, MDA-MB-231, PC-12, C6 and RAW264.7 whole cell lysates. Flow Cyt:

HeLa and C6 cells. IP: U-87 MG whole cell lysate. Rat brain tissue lysate.

General notes This product has switched from a hybridoma to recombinant production method on 8th March

2021.

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.

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.

Preservative: 0.01% Sodium azide Storage buffer

Constituents: 0.05% BSA, 59% PBS, 40% Glycerol (glycerin, glycerine)

Purity Protein A purified

Clonality Monoclonal

Clone number 74.1

Isotype IgG2b

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab23905 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
Flow Cyt		1/1000.
IP	*** <u>*</u> (1)	1/30.
WB	★★★★ ★ ★ (5)	1/1000. Detects a band of approximately 73 kDa (predicted molecular weight: 73 kDa).

Application notes

Is unsuitable for ICC.

Target

Function

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. The intermediate chains mediate the binding of dynein to dynactin via its 150 kDa component (p150-glued) DCNT1. May play a role in mediating the interaction of cytoplasmic dynein with membranous organelles and kinetochores.

Sequence similarities

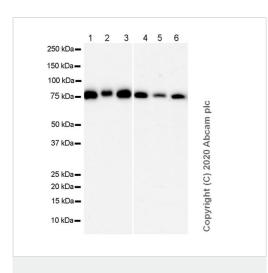
Belongs to the dynein intermediate chain family.

Contains 7 WD repeats.

Cellular localization

Cytoplasm. Chromosome, centromere, kinetochore. Cytoplasm, cytoskeleton, spindle pole.

Images



Western blot - Anti-Cytoplasmic Dynein Intermediate chain antibody [74.1] (ab23905)

All lanes : Anti-Cytoplasmic Dynein Intermediate chain antibody [74.1] (ab23905) at 1/1000 dilution

Lane 1 : U-87 MG (human glioblastoma-astrocytoma epithelial cell), whole cell lysate

Lane 2: SH-SY5Y (human neuroblastoma epithelial cell), whole cell lysate

Lane 3: MDA-MB-231 (human breast adenocarcinoma epithelial cell), whole cell lysate

Lane 4 : PC-12 (rat adrenal gland pheochromocytoma), whole cell lysate

Lane 5: C6 (rat glial tumor glial cell), whole cell lysate

Lane 6: RAW264.7 (mouse Abelson murine leukemia virus-

induced tumor macrophage), whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Peroxidase-Conjugated Goat anti-Mouse IgG (H+L) at

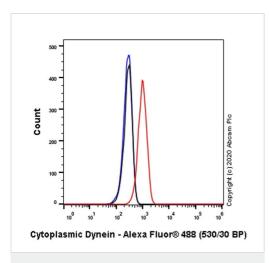
1/10000 dilution

Predicted band size: 73 kDa **Observed band size:** 73 kDa

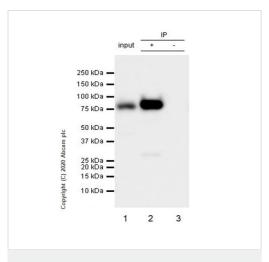
Blocking buffer and concentration: 5% NFDM/TBST

Exposure time:

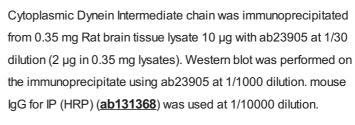
Lanes 1-3: 37 seconds Lanes 4-6: 81 seconds



Flow Cytometry - Anti-Cytoplasmic Dynein Intermediate chain antibody [74.1] (ab23905) Flow Cytometry analysis of HeLa (human cervix adenocarcinoma epithelial cell line) cells labeling Cytoplasmic Dynein Intermediate chain with ab23905 at 1/1000 dilution. Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Goat Anti-Mouse IgG (Alexa Fluor® 488) (ab150113) at 1/2000 was used as the secondary antibody (red). Mouse monoclonal IgG was used as the isotype control (black). Cells without incubation with primary and secondary antibodies were used as the unlabeled control (blue).



Immunoprecipitation - Anti-Cytoplasmic Dynein Intermediate chain antibody [74.1] (ab23905)



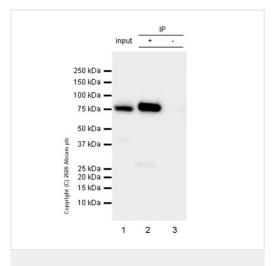
Lane 1: Rat brain tissue lysate 10 µg

Lane 2: ab23905 IP in Rat brain tissue lysate

Lane 3: Mouse monoclonal IgG instead of ab23905 in rat brain tissue lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 1 second



Immunoprecipitation - Anti-Cytoplasmic Dynein Intermediate chain antibody [74.1] (ab23905)

Cytoplasmic Dynein Intermediate chain was immunoprecipitated from 0.35 mg U-87 MG (human glioblastoma-astrocytoma epithelial cell) whole cell lysate 10 μ g with ab23905 at 1/30 dilution (2 μ g in 0.35 mg lysates). Western blot was performed on the immunoprecipitate using ab23905 at 1/1000 dilution. mouse lgG for IP (HRP) (ab131368) was used at 1/10000 dilution.

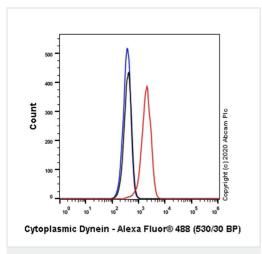
Lane 1: U-87 MG whole cell lysate 10 µg

Lane 2: ab23905 IP in U-87 MG whole cell lysate

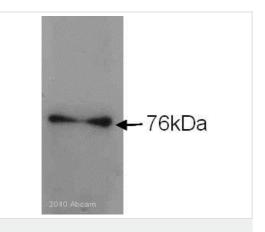
Lane 3: Mouse monoclonal IgG instead of ab23905 in U-87 MG whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 1 second



Flow Cytometry - Anti-Cytoplasmic Dynein Intermediate chain antibody [74.1] (ab23905) Flow Cytometry analysis of C6 (rat glial tumor cell line) cells labeling Cytoplasmic Dynein Intermediate chain with ab23905 at 1/1000 dilution. Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Goat Anti-Mouse IgG (Alexa Fluor[®] 488) (ab150113) at 1/2000 was used as the secondary antibody (red). Mouse monoclonal IgG was used as the isotype control (black). Cells without incubation with primary and secondary antibodies were used as the unlabeled control (blue).



Western blot - Anti-Cytoplasmic Dynein Intermediate chain antibody [74.1] (ab23905)

This image is courtesy of an anonymous Abreview

Anti-Cytoplasmic Dynein Intermediate chain antibody [74.1] (ab23905) at 1/1000 dilution + Rat Sciatic nerve whole tissue lysate at 60 µg

Secondary

HRP-conjugated Goat anti-mouse IgG at 1/10000 dilution

Developed using the ECL technique.

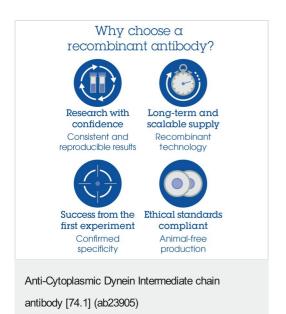
Performed under reducing conditions.

Predicted band size: 73 kDa

Gel: 10% acryl amid

Blocking Step: 5% Milk for 30 minutes at 25°C

This image was generated from the hybridoma version of the product.



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