# abcam

### Product datasheet

# Anti-DYNLT3 antibody ab121209

**5 References** 4 Images

Overview

Product name Anti-DYNLT3 antibody

**Description** Rabbit polyclonal to DYNLT3

Host species Rabbit

Tested applications Suitable for: IHC-P, WB

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen antigen sequence: DEVGFNAEEA HNIVKECVDG VLGGEDYNHN NINQWTASIV

EQSLTHLVKL GKAYKYNTC AVVQKSAYGF HTASSCFWDT TSDGTCTVRW E, corresponding

to amino acids 9-99 of Human DYNLT3.

Run BLAST with EXPASY Run BLAST with S NCBI

Positive control WB: Wild-type HeLa, SK-MEL-20, MCF-7, and NBT-II whole cell lysates; IHC-P: Human cerebral

cortex tissue.

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**Properties** 

Form Liquid

**Storage instructions** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

**Storage buffer** pH: 7.20

Preservative: 0.02% Sodium azide

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

**Purity** Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

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#### **Applications**

#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab121209 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
IHC-P		1/1000 - 1/2500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		Use a concentration of 0.04 - 0.4 µg/ml.

#### **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. Probably binds BUB3 as part of transport cargo. Required for the efficient progression through mitosis.

Sequence similarities

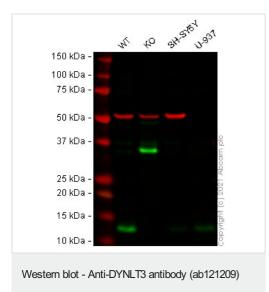
Belongs to the dynein light chain Tctex-type family.

**Cellular localization** 

 ${\it Nucleus. Cytoplasm > cytoskeleton. Chromosome > centromere > kinetochore. Colocalizes with}$ 

BUB3 at kinetochores specifically during prometaphase.

#### **Images**



All lanes: Anti-DYNLT3 antibody (ab121209) at 0.04 µg/ml

Lane 1: Wild-type HeLa cell lysate

Lane 2: DYNLT3 knockout HeLa cell lysate

Lane 3: SH-SY5Y cell lysate

Lane 4: U937 cell lysate

Lysates/proteins at 20 µg per lane.

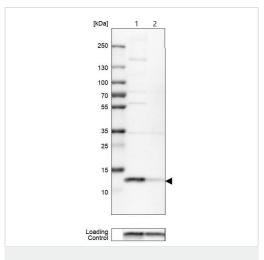
Performed under reducing conditions.

Observed band size: 13 kDa

False colour image of Western blot: Anti-DYNLT3 antibody (ab121209) staining at 0.04 μg/ml, shown in green; Mouse anti-Alpha Tubulin [DM1A] (ab7291) loading control staining at 1/20000 dilution, shown in red.

In Western blot, ab121209 was shown to bind specifically to

DYNLT3. A band was observed at 13 kDa in wild-type HeLa cell lysates with no signal observed at this size in DYNLT3 CRISPR-Cas9 edited cell lysates. The band observed in the CRISPR-Cas9 edited lysate lane above 13 kDa is likely to represent DYNLT3 with an insertion. This has not been investigated further and the functional properties of the gene product have not been determined. To generate this image, wild-type and DYNLT3 CRISPR-Cas9 edited HeLa cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (ab216776) at 1/20000 dilution.



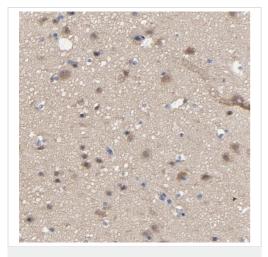
Western blot - Anti-DYNLT3 antibody (ab121209)

All lanes: Anti-DYNLT3 antibody (ab121209)

Lane 1 : SK-MEL-30 (human melanoma cell line) whole cell lysate

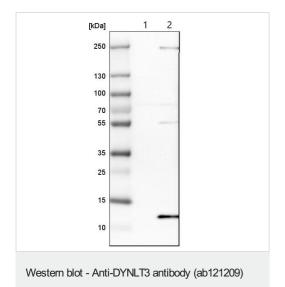
Lane 2 : MCF7 (human breast adenocarcinoma cell line) whole cell
lysate

Loading control: Anti-PFN1.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-DYNLT3 antibody (ab121209)

ab121209 at 1/750 dilution staining DYNLT3 in Paraffin-embedded Human cerebral cortex tissue by Immunohistochemistry.



All lanes: Anti-DYNLT3 antibody (ab121209)

**Lane 1 :** NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysate

Lane 2: NBT-II (rat urinary bladder tumor cell line) whole cell lysate

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

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