


Product datasheet

Anti-NEK7 antibody [EPR4901] ab109433

KO VALIDATED Recombinant RabMAB[®]

[2 References](#) [4 Images](#)

Overview

| | |
|----------------------------|--|
| Product name | Anti-NEK7 antibody [EPR4901] |
| Description | Rabbit monoclonal [EPR4901] to NEK7 |
| Host species | Rabbit |
| Tested applications | Suitable for: Flow Cyt (Intra), WB Unsuitable for: ICC/IF, IHC-P or IP |
| Species reactivity | Reacts with: Human Predicted to work with: Mouse, Rat  |
| Immunogen | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. |
| Positive control | Human brain, HeLa, A549, HepG2, fetal liver, and Jurkat lysates; Jurkat cells |
| General notes | <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAB[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB[®] patents.</p> |

Properties

| | |
|-----------------------------|--|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C. |
| Storage buffer | pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant |
| Purity | Protein A purified |
| Clonality | Monoclonal |
| Clone number | EPR4901 |

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab109433 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 (Intra) | | Use a concentration of 0.2 µg/ml. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. PFA fixation not recommended |
| WB | | 1/1000 - 1/5000. Predicted molecular weight: 35 kDa. |

Application notes

Is unsuitable for ICC/IF, IHC-P or IP.

Target

Tissue specificity

Highly expressed in lung, muscle, testis, brain, heart, liver, leukocyte and spleen. Lower expression in ovary, prostate and kidney. No expression seen in small intestine.

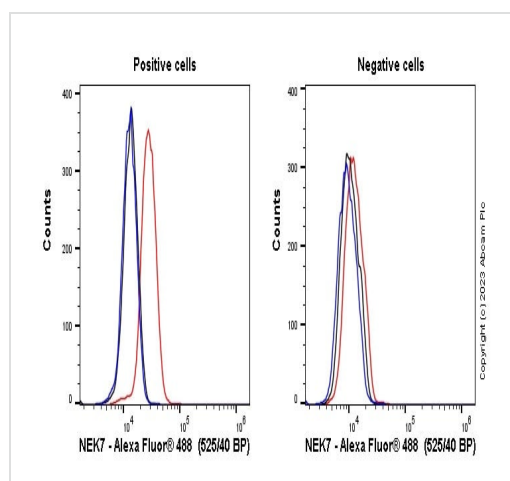
Sequence similarities

Belongs to the protein kinase superfamily. NEK Ser/Thr protein kinase family. NIMA subfamily. Contains 1 protein kinase domain.

Cellular localization

Cytoplasm.

Images



Flow Cytometry (Intracellular) - Anti-NEK7 antibody [EPR4901] (ab109433)

Flow cytometry overlay histogram showing left wild-type HAP1 WT and right NEK7 knockout HAP1 WT stained with ab109433 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilised with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS containing 10% normal goat serum to block non-specific protein-protein interaction followed by the antibody (ab109433) (1×10^6 in 100µl at 0.2 µg/ml (1/3135 dilution)) for 30min at 22°C.

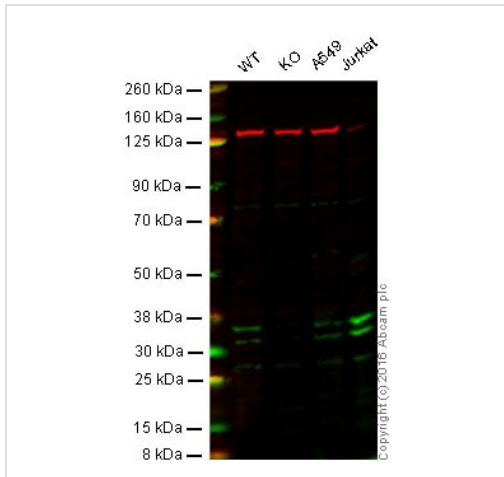
The secondary antibody Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed was incubated at 1/4000 dilution for 30min at 22°C

Isotype control antibody Recombinant Rabbit IgG, monoclonal [EPR25A] was used at the same concentration and conditions as the primary antibody (black line). Unlabelled sample was also used as a control (blue line).

Acquisition of >5000 events were collected using a 50 mW Blue

laser (488nm) and 525/40 bandpass filter.

PFA fixation is not recommended.



Western blot - Anti-NEK7 antibody [EPR4901]
(ab109433)

Lane 1: Wild-type HAP1 cell lysate (40 µg)

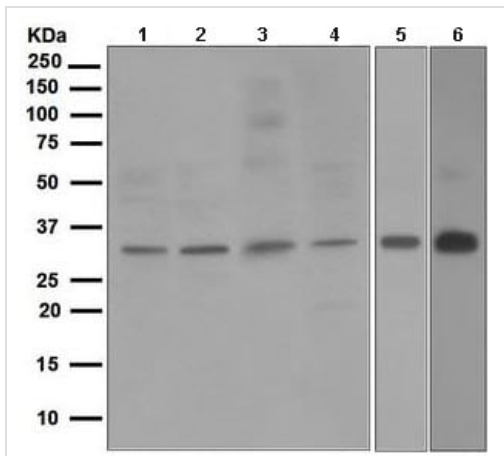
Lane 2: NEK7 knockout HAP1 cell lysate (40 µg)

Lane 3: A549 cell lysate (20 µg)

Lane 4: Jurkat cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab109433 observed at 35 kDa. Red - loading control, **ab18058**, observed at 124 kDa.

ab109433 was shown to specifically react with NEK7 when NEK7 knockout samples were used. Wild-type and NEK7 knockout samples were subjected to SDS-PAGE. Ab109433 and **ab18058** (loading control to Vinculin) were diluted at 1/1000 and 1/10000 dilution respectively and incubated overnight at 4C. 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 1/10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-NEK7 antibody [EPR4901]
(ab109433)

All lanes : Anti-NEK7 antibody [EPR4901] (ab109433) at 1/10000 dilution

Lane 1 : Human brain lysate

Lane 2 : HeLa cell lysate

Lane 3 : A549 cell lysate

Lane 4 : HepG2 cell lysate

Lane 5 : Fetal liver lysate

Lane 6 : Jurkat cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 35 kDa

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-NEK7 antibody [EPR4901] (ab109433)

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

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