abcam

ab249362

Anti-DEK antibody [EPR11034] - 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	EPR11034
Purification technique	Affinity purification Protein A
Concentration	0.991 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Rat
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Rat
Dilution info	-
Notes	-

Target data

See full target information DEK

Function	Involved in chromatin organization.

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

ab249362 is the carrier-free version of ab166624.

Species reactivity

Mouse: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

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.

Supplementary info

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

Activity summary	DEK is a nuclear phosphoprotein with an approximate mass of 45 kDa. Researchers often study DEK in the context of its function in chromatin organization and transcription regulation as it serves as an architectural chromatin protein. DEK expression is ubiquitous found in various tissues with high levels in actively dividing cells. It is essential in processes that require dynamic chromatin remodeling.

Biological function summary	DEK plays a role in maintaining genomic integrity and regulating transcription. It operates within a complex that interacts with histone proteins to modulate chromatin structure. DEK also affects mRNA splicing by interacting with the spliceosomal complex further underlining its role in transcription control. As a multifunctional protein DEK helps coordinate several essential cellular activities.
Pathways	DEK integrates into the p53 and Wnt signaling pathways. It influences cell cycle control and apoptosis within the p53 pathway interacting with proteins like MDM2 to affect p53 stability. Within the Wnt pathway DEK contributes to cell proliferation and differentiation by affecting beta-catenin levels and interacting with transcription factors involved in Wnt target gene expression.
Associated diseases and disorders	DEK has strong connections to various types of cancers and autoimmune diseases. DEK overexpression is often associated with tumorigenesis particularly in acute myeloid leukemia where it collaborates with NUP214 fusion partners. In autoimmune disorders like systemic lupus erythematosus DEK may become an autoantigen and its interaction with proteins such as nucleolin could contribute to disease pathogenesis.

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

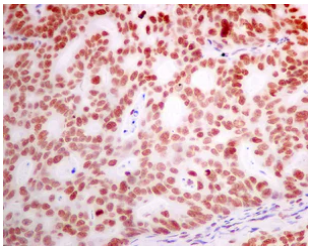
We do not recommend this combination. It is not covered by our product promise.

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

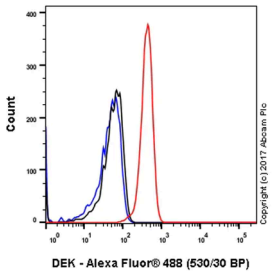


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DEK antibody [EPR11034] - BSA and Azide free (ab249362)

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

This data was developed using ab166624, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Human gastric carcinoma tissue labeling DEK with ab166624 at 1/250 dilution.

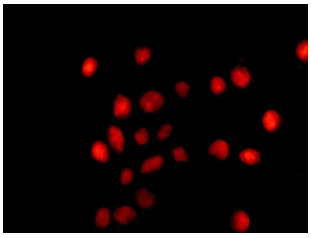
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-DEK antibody [EPR11034] - BSA and Azide free (ab249362)

DEK Flow Cytometry (Intracellular) staining using rabbit Anti-DEK antibody

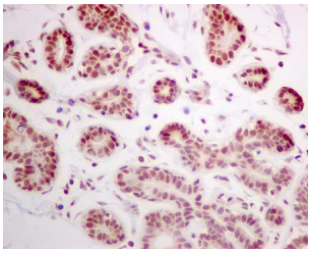
This data was developed using ab166624, the same antibody clone in a different buffer formulation.
Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling DEK (red) with ab166624 at a 1/2000 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 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.



Immunocytochemistry/ Immunofluorescence - Anti-DEK antibody [EPR11034] - BSA and Azide free (ab249362)

DEK Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-DEK antibody

This data was developed using ab166624, the same antibody clone in a different buffer formulation.Immunofluorescence analysis of 293T cells labeling DEK with ab166624 at 1/100 dilution.

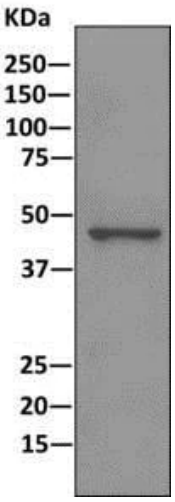


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DEK antibody [EPR11034] - BSA and Azide free (ab249362)

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

This data was developed using ab166624, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Human breast tissue labeling DEK with ab166624 at 1/250 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



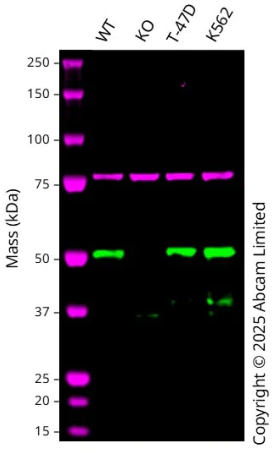
Immunoprecipitation - Anti-DEK antibody [EPR11034] - BSA and Azide free (ab249362)

This data was developed using ab166624, the same antibody clone in a different buffer formulation.
Immunoprecipitation of DEK in pellet from HeLa cell lysate using ab166624 at 1/10 dilution, followed by western blot detection of DEK using as secondary an HRP-conjugated anti-rabbit IgG, which preferentially detects the non-reduced form of rabbit IgG.

All lanes:
Immunoprecipitation - Anti-DEK antibody [EPR11034] (ab166624) at 1/1000 dilution

All lanes:
immunoprecipitation pellet from HeLa cell lysate at 10 µg

Predicted band size: 42 kDa



Western blot - Anti-DEK antibody [EPR11034] - BSA and Azide free (ab249362)

DEK Western blot staining using rabbit Anti-DEK antibody

This data was developed using ab166624, the same antibody clone in a different buffer formulation.
Western blot: Rabbit Monoclonal[EPR11034] to DEK ab166624 staining at 1/2000 dilution, shown in green; Mouse anti-CANX (ab238078) loading control staining at 1/20,000 dilution, shown in magenta. A band was observed at 50 kDa in Wild-type HeLa cell lysates with no signal observed at this size in DEK knockout HeLa cell line. To generate this image, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3pc Milk in TBS-0.1 % Tween® 20 (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 800CW & Goat anti-Mouse 680RD at 1/20,000 dilution.

All lanes:
Western blot - Anti-DEK antibody [EPR11034] (ab166624) at 1/2000 dilution

Lane 1:
Wild-type HeLa at 20 µg

Lane 2:
Human DEK knockout HeLa cell line at 20 µg

Lane 3:
T-47D at 20 µg

Lane 4:
K562 at 20 µg

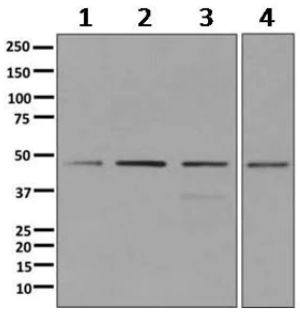
Secondary

All lanes:
Goat anti-Rabbit 800CW & Goat anti-Mouse 680RD at 1/20000 dilution

Performed under reducing conditions.

Predicted band size: 43 kDa

Observed band size: 50 kDa



Western blot - Anti-DEK antibody [EPR11034] - BSA and Azide free (ab249362)

DEK Western blot staining using rabbit Anti-DEK antibody

This data was developed using ab166624, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-DEK antibody [EPR11034] (ab166624) at 1/1000 dilution

Lane 1:
293T cell lysates at 10 µg

Lane 2:
HeLa cell lysates at 10 µg

Lane 3:
Jurkat cell lysates at 10 µg

Lane 4:
K562 cell lysates at 10 µg

Predicted band size: 42 kDa

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