abcam

ab249101

Anti-ILF2/NF45 antibody [EPR10695(B)] - BSA and Azide free

Recombinant | RabMAb

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	EPR10695(B)
Purification technique	Affinity purification
Concentration	0.999 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	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

Flow Cyt (Intra)

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information ILF2

Function	Chromatin-interacting protein that forms a stable heterodimer with interleukin enhancer-binding factor 3/ILF3 and plays a role in several biological processes including transcription, innate immunity or cell growth (PubMed:18458058, PubMed:31212927). Essential for the efficient reshuttling of ILF3 (isoform 1 and isoform 2) into the nucleus. Together with ILF3, forms an RNA-binding complex that is required for mitotic progression and cytokinesis by regulating the expression of a cluster of mitotic genes. Mechanistically, competes with STAU1/STAU2-mediated mRNA decay (PubMed:32433969). Also plays a role in the inhibition of various viruses including Japanese encephalitis virus or enterovirus 71. (Microbial infection) Plays a positive role in HIV-1 virus production by binding to and thereby stabilizing HIV-1 RNA, together with ILF3.

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

ab249101 is the carrier-free version of ab154791.

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	ILF2 also known as NF45 is a protein with a mass of approximately 45 kDa. It plays a mechanical role in regulating gene expression at the post-transcriptional level. ILF2/NF45 achieves this by binding to RNA and other regulatory proteins impacting RNA processing and stability. ILF2 is broadly expressed in various tissues with higher expression levels in cells that undergo rapid division such as immune cells and cancerous cells. The protein's interaction with RNA implicates it in important cellular processes that demand accurate RNA handling.
Biological function summary	ILF2/NF45 contributes to the formation of a multiprotein complex essential for modulating nuclear events. It is a significant participant in the Ilf2/Ilf3 complex where it cooperates with NF90 (also known as ILF3) to affect RNA dynamics. This complex manages processes like RNA transport and stabilization highlighting its role in regulating cellular responses under stressful situations. The presence of ILF2/NF45 in this complex suggests its involvement in essential cellular survival mechanisms providing stability to various RNA species within the cell.
Pathways	ILF2/NF45 integrates into cellular signaling through influences on immune response pathways and the cell cycle regulation. It has connections with proteins like NF90 impacting the transcriptional pathways that influence immune cell function and activity. This involvement permits ILF2/NF45 to regulate pathways such as those mediated by NF-κB where transcriptional control of inflammatory responses is critical. The integration into these pathways underlines its substantial role in maintaining cellular homeostasis.
Associated diseases and disorders	ILF2/NF45 has links to conditions including cancer and autoimmune diseases. It is often overexpressed in various cancers playing a role in tumor progression and metastasis by modulating cell cycle-related mRNA turnover. NF90 frequently partners with ILF2/NF45 in these diseases reflecting a shared pathway influencing the development of malignancies and potentially autoimmune conditions. Understanding these interactions offers potential therapeutic targets as

modulation of ILF2/NF45 and its associated complexes could alter disease outcomes.

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

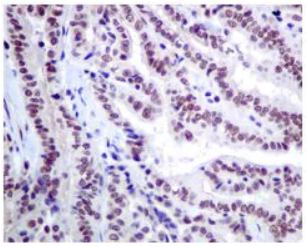
We do not recommend this combination. It is not covered by our product promise.

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

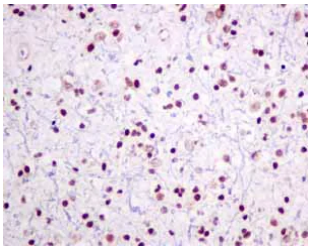


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ILF2/NF45 antibody [EPR10695(B)] - BSA and Azide free (ab249101)

ILF2/NF45 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-ILF2/NF45 antibody

This data was developed using ab154791, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Human thyroid gland carcinoma tissue labeling ILF2/NF45 with ab154791 at 1/50 dilution.

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

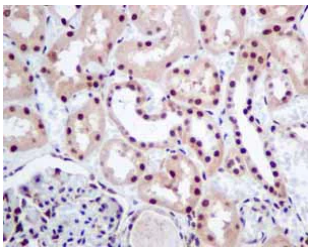


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ILF2/NF45 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-ILF2/NF45 antibody

This data was developed using ab154791, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin embedded Human glioma tissue using ab154791 showing +ve staining.

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

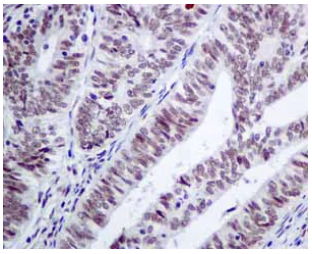


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ILF2/NF45 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-ILF2/NF45 antibody

This data was developed using ab154791, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin embedded Human normal kidney tissue using ab154791 showing +ve staining.

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

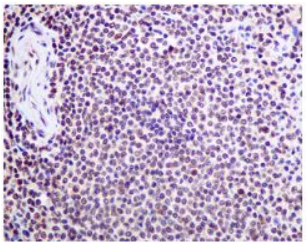


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ILF2/NF45 antibody [EPR10695(B)] - BSA and Azide free (ab249101)

ILF2/NF45 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-ILF2/NF45 antibody

This data was developed using ab154791, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin embedded Human endometrial carcinoma tissue using ab154791 showing +ve staining.

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

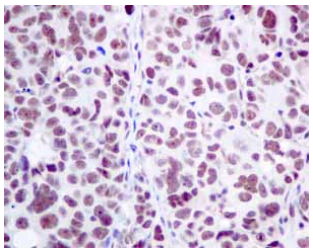


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ILF2/NF45 antibody [EPR10695(B)] - BSA and Azide free (ab249101)

ILF2/NF45 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-ILF2/NF45 antibody

This data was developed using ab154791, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Human spleen tissue labeling ILF2/NF45 with ab154791 at 1/50 dilution.

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

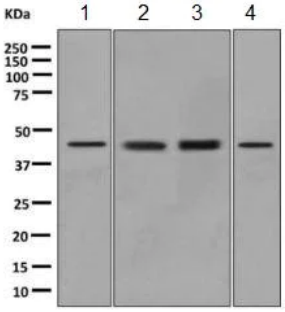


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ILF2/NF45 antibody [EPR10695(B)] - BSA and Azide free (ab249101)

ILF2/NF45 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-ILF2/NF45 antibody

This data was developed using ab154791, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin embedded Human ovarian carcinoma tissue using ab154791 showing +ve staining.

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



Western blot - Anti-ILF2/NF45 antibody [EPR10695(B)] - BSA and Azide free (ab249101)

This data was developed using ab154791, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-ILF2/NF45 antibody [EPR10695(B)] (ab154791) at 1/1000 dilution

Lane 1:
K562 cell lysate at 10 µg

Lane 2:
Raji cell lysate at 10 µg

Lane 3:
A431 cell lysate at 10 µg

Lane 4:
HeLa cell lysate at 10 µg

Secondary

All lanes:
Goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 43 kDa

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