abcam

ab154791

Anti-ILF2/NF45 antibody [EPR10695(B)]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR10695(B)
Purification technique	Affinity purification Protein A
Concentration	0.272 - 0.28 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/50 - 1/100
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	1/1000 - 1/10000
Notes	-

Expected

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

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/100 - 1/1000
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

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	Conditional Ambient
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C

Notes

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.

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.

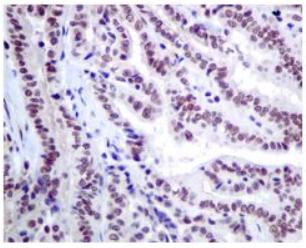
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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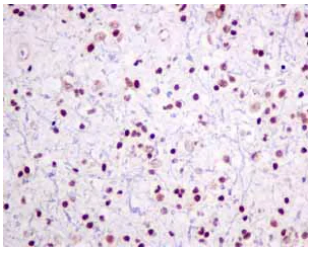
8 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ILF2/NF45 antibody [EPR10695(B)] (ab154791)

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

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.

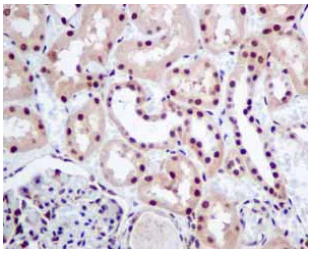


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ILF2/NF45 antibody [EPR10695(B)] (ab154791)

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

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.

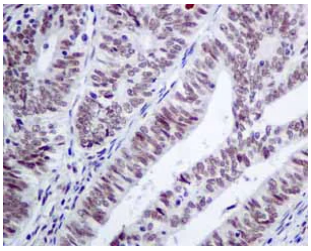


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ILF2/NF45 antibody [EPR10695(B)] (ab154791)

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

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.

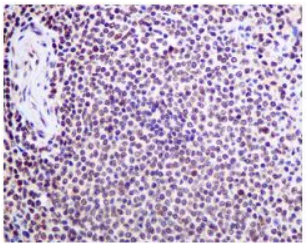


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ILF2/NF45 antibody [EPR10695(B)] (ab154791)

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

Immunohistochemical analysis of paraffin embedded Human endometrial carcinoma tissue using ab154791 showing +ve staining.

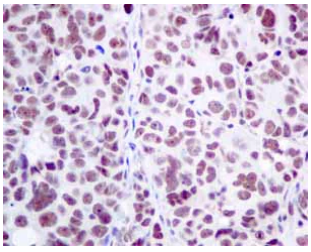
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ILF2/NF45 antibody [EPR10695(B)] (ab154791)

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

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.

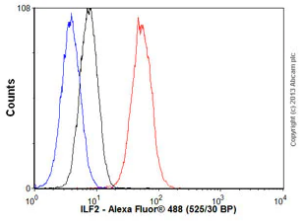


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ILF2/NF45 antibody [EPR10695(B)] (ab154791)

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

Immunohistochemical analysis of paraffin embedded Human ovarian carcinoma tissue using ab154791 showing +ve staining.

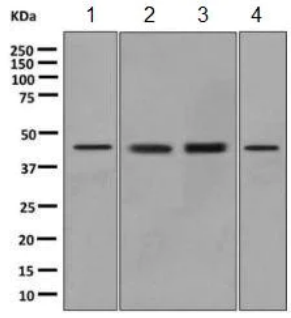
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-ILF2/NF45 antibody [EPR10695(B)] (ab154791)

ILF2/NF45 Flow Cytometry (Intracellular) staining using rabbit Anti-ILF2/NF45 antibody

Overlay histogram showing HeLa cells stained with ab154791 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab154791, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Western blot - Anti-ILF2/NF45 antibody [EPR10695(B)] (ab154791)

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'.