abcam

ab250974

Anti-U2AF1L4 antibody [EPR14349] - 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	EPR14349

Reactivity data

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

WB

Tested

Species	Mouse, Human, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

Target data

See full target information U2AF1L4

Function RNA-binding protein that function as a pre-mRNA splicing factor. Plays a critical role in both constitutive and enhancer-dependent splicing by mediating protein-protein interactions and protein-RNA interactions required for accurate 3'-splice site selection. Acts by enhancing the binding of U2AF2 to weak pyrimidine tracts. Also participates in the regulation of alternative pre-mRNA splicing. Activates exon 5 skipping of PTPRC during T-cell activation; an event reversed by GFI1. Binds to RNA at the AG dinucleotide at the 3'-splice site (By similarity). Shows a preference for AGC or AGA (By similarity).

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

ab250974 is the carrier-free version of ab188582.

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	U2AF1L4 also known as U2 small nuclear RNA auxiliary factor 1-like 4 is a protein with a mass of about 30 kilodaltons. It plays a role in RNA splicing acting at the early stages of spliceosome assembly. U2AF1L4 binds to the polypyrimidine tract of pre-mRNA introns facilitating the recruitment of U2 snRNP to the branch point

	sequence. Expression of U2AF1L4 occurs mainly in tissues that are rich in nucleic acids and RNA such as testis and certain types of cancer cells.
Biological function summary	U2AF1L4 supports the regulation of gene expression through its role in the spliceosome machinery. It may form complexes with other splicing factors such as U2AF2 that are part of the early stages of spliceosomal assembly. This action supports the precise removal of introns and positions the exons accurately for translation. The ability to differentiate splice sites ensures diversity in mRNA transcription which is essential for proper function of genes in diverse tissues.
Pathways	U2AF1L4 fits into the pre-mRNA splicing pathway. It operates closely with other splicing-associated proteins like SF1 to help in the selection and cleavage of splice sites. Additionally U2AF1L4 interacts within the spliceosome pathway contributing to the splicing outcomes that regulate gene expression and are necessary for maintaining normal cell growth and function.
Associated diseases and disorders	Irregularities in U2AF1L4 have been linked to certain cancers. Aberrant splicing by U2AF1L4 might play a role in tumor progression where mutations in its coding genes could lead to mis-splicing events. It engages with other proteins implicated in cancer such as the splicing regulator SF3B1 suggesting a complex interplay in tumorigenesis. Understanding these relationships could help develop targeted therapies for related disorders.

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

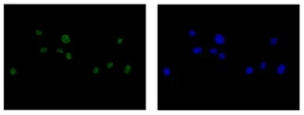
We do not recommend this combination. It is not covered by our product promise.

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.

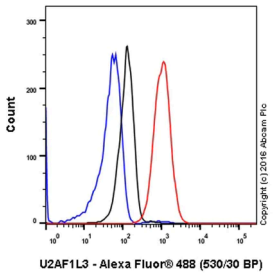
4 product images



Immunocytochemistry/ Immunofluorescence - Anti-U2AF1L4 antibody [EPR14349] - BSA and Azide free (ab250974)

U2AF1L4 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-U2AF1L4 antibody

This data was developed using ab188582, the same antibody clone in a different buffer formulation.
Immunofluorescent analysis of paraformaldehyde-fixed U87-MG cells labeling U2AF1L4 with ab188582 at 1/250 followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green) and DAPI staining.



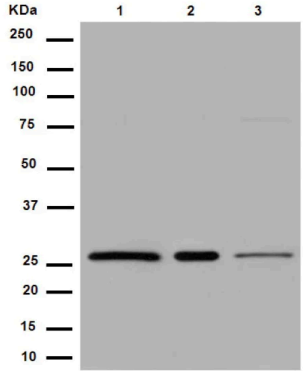
Flow Cytometry (Intracellular) - Anti-U2AF1L4 antibody [EPR14349] - BSA and Azide free (ab250974)

U2AF1L4 Flow Cytometry (Intracellular) staining using rabbit Anti-U2AF1L4 antibody

This data was developed using ab188582, the same antibody clone in a different buffer formulation.
ab188582 staining U2AF1L4 in A549 (human lung carcinoma) by intracellular flow cytometry. Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. The sample was incubated with the primary antibody at a dilution of 1/200. A goat anti rabbit IgG (Alexa Fluor® 488) at a dilution of 1/2000 was used as the secondary antibody.

Isoytype control: Rabbit monoclonal IgG (Black)

Unlabelled control: Cell without incubation with primary antibody and secondary antibody (Blue)



Western blot - Anti-U2AF1L4 antibody [EPR14349] - BSA and Azide free (ab250974)

U2AF1L4 Western blot staining using rabbit Anti-U2AF1L4 antibody

This data was developed using ab188582, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-U2AF1L4 antibody [EPR14349] (ab188582) at 1/10000 dilution

Lane 1:
Human fetal brain lysate at 20 µg

Lane 2:
Human cerebellum lysate at 20 µg

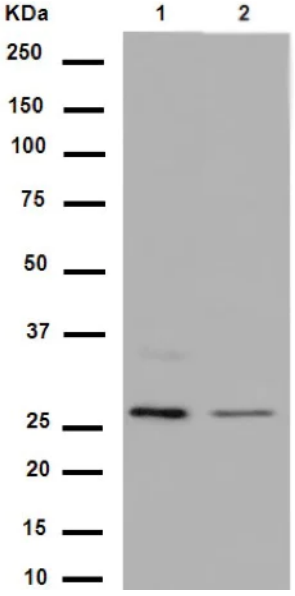
Lane 3:
K562 lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 26 kDa

Observed band size: 26 kDa



Western blot - Anti-U2AF1L4 antibody [EPR14349] - BSA and Azide free (ab250974)

This data was developed using ab188582, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-U2AF1L4 antibody [EPR14349] (ab188582)

Lane 1:
Mouse brain lysate at 10 µg

Lane 2:
PC-12 lysate at 10 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 26 kDa

Observed band size: 26 kDa

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