abcam

ab179818

Anti-FBXO21 antibody [EPR13163]

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	EPR13163
Purification technique	Affinity purification Protein A
Concentration	0.343 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	1/10 - 1/100
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/10000 - 1/50000
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/10 - 1/100
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Tested

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

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information FBXO21

Function	Substrate-recognition component of the SCF (SKP1-CUL1-F-box protein)-type E3 ubiquitin ligase complex.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

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	FBXO21 also known as F-box only protein 21 is a component of the SCF (SKP1-CUL1-F-box protein) ubiquitin ligase complex. It has a mass of approximately 58 kDa. This protein facilitates the ubiquitination process by recognizing specific protein substrates and marking them for degradation by the proteasome. FBXO21 is expressed in various tissues with notable levels observed in the brain and muscle. Its expression patterns suggest a role in several physiological processes which can be tissue-specific.
Biological function summary	FBXO21 contributes to the regulation of protein turnover within the cell. It is a part of the SCF complex which is important in maintaining protein homeostasis. This protein complex targets a range of substrates influencing cell cycle regulation signal transduction and transcription processes. By influencing these processes FBXO21 can impact cell proliferation and differentiation which are vital for normal cellular function.
Pathways	FBXO21 is engaged in the ubiquitin-proteasome pathway a critical cellular system that controls protein degradation. This pathway is essential for various cellular processes including cell cycle control and the response to oxidative stress. FBXO21's activity is closely related to other F-box proteins such as β-TrCP and SKP2 which participate in similar ubiquitination pathways. The interactions and targets of FBXO21 in these pathways are important for its functional roles.
Associated diseases and disorders	FBXO21 has connections to certain neurodegenerative conditions and muscle diseases. Alterations in the function or expression of FBXO21 can affect proteins like amyloid precursor protein which has associations with Alzheimer's disease. Furthermore dysregulation in muscle protein turnover due to FBXO21 malfunction could contribute to muscular dystrophies where it may interact with proteins like atrogin-1 and MuRF1. Understanding these relationships helps delineate the role FBXO21 plays in disease development and progression.

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

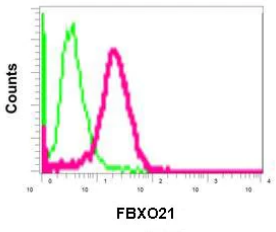
We do not recommend this combination. It is not covered by our product promise.

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.

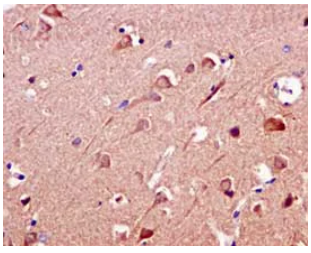
5 product images



Flow Cytometry (Intracellular) - Anti-FBXO21 antibody [EPR13163] (ab179818)

FBXO21 Flow Cytometry (Intracellular) staining using rabbit Anti-FBXO21 antibody

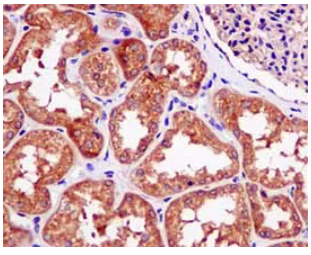
Intracellular flow cytometric analysis of permeabilized HeLa cells labeling FBXO21 with ab179818 at 1/10 dilution (red),compared toa rabbit IgG negative control (green).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FBXO21 antibody [EPR13163] (ab179818)

FBXO21 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-FBXO21 antibody

Immunohistochemical analysis of paraffin-embedded Human brain tissue labeling FBXO21 with ab179818 at 1/50 dilution.
Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.

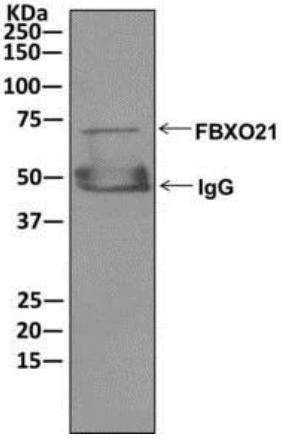


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FBXO21 antibody [EPR13163] (ab179818)

FBXO21 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-FBXO21 antibody

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling FBXO21 with ab179818 at 1/50 dilution.

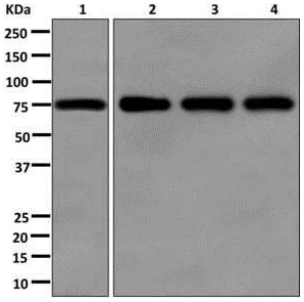
Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-FBXO21 antibody [EPR13163] (ab179818)

Western blot analysis on immunoprecipitation pellet from HeLa cell lysate labeling FBXO21 with ab179818.
All lanes:
Immunoprecipitation - Anti-FBXO21 antibody [EPR13163] (ab179818)

Predicted band size: 72 kDa



Western blot - Anti-FBXO21 antibody [EPR13163] (ab179818)

All lanes:
Western blot - Anti-FBXO21 antibody [EPR13163] (ab179818) at 1/10000 dilution

Lane 1:
MCF-7 cell lysate at 10 µg

Lane 2:
HeLa cell lysate at 10 µg

Lane 3:
HepG2 cell lysate at 10 µg

Lane 4:
U-87 MG cell lysate at 10 µg

Predicted band size: 72 kDa

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