abcam

ab205532

Anti-ZHX2 antibody [EPR17303]

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	EPR17303
Purification technique	Affinity purification Protein A
Concentration	0.805 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Mouse
Dilution info	1/2000
Notes	-

Species	Rat

Dilution info	1/2000
Notes	-

Species	Human
Dilution info	1/2000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/250
Notes	-

Expected

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

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/80
Notes	-

Expected

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

Target data

See full target information ZHX2

Function	Acts as a transcriptional repressor (PubMed:12741956). Represses the promoter activity of the CDC25C gene stimulated by NFYA (PubMed:12741956). May play a role in retinal development where it regulates the composition of bipolar cell populations, by promoting differentiation of bipolar OFF-type cells (By similarity). In the brain, may promote maintenance and suppress differentiation of neural progenitor cells in the developing cortex (By similarity).

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	The Zinc fingers and homeoboxes protein 2 (ZHX2) is a transcriptional repressor with an approximate molecular mass of 95 kDa. ZHX2 is expressed in various

	tissues including the liver kidney and spleen and it plays a role in regulating gene expression by binding to specific DNA sequences. Also known as zinc fingers and homeoboxes protein 2 ZHX2 contains two C2H2-type zinc finger domains and four homeobox domains which enable its DNA-binding ability and interaction with other proteins.
Biological function summary	ZHX2 impacts gene regulation by interacting with other transcription factors. It is known to associate with ZHX1 and NF-YA to form a protein complex that modulates the expression of various target genes. Through these interactions ZHX2 influences cell division differentiation and survival. It can act as a transcriptional repressor by binding to promoter regions of genes therefore modulating their expression levels in cellular contexts.
Pathways	ZHX2 influences several biological processes. It is involved in the Wnt signaling pathway where it can influence cellular proliferation and differentiation by regulating the expression of target genes. Additionally ZHX2 interacts with the pathways governed by the transforming growth factor-beta (TGF-β) family which are important for cellular proliferation differentiation and apoptosis. ZHX2 can modulate these pathways by interacting with proteins such as SMAD2/3 and β-catenin impacting their downstream effects.
Associated diseases and disorders	ZHX2 has been linked to cancer progression and autoimmune diseases. In certain cancers ZHX2 expression levels correlate with tumor progression suggesting it may serve as a potential marker or therapeutic target. ZHX2 influences the expression of oncogenes and tumor suppressor genes in this context. In autoimmune conditions it has been implicated in abnormal immune responses potentially by regulating genes involved in immune cell function. Through these diseases ZHX2 is associated with proteins like p53 in cancer and NF-κB in autoimmune disorders affecting their signaling and regulatory roles.

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

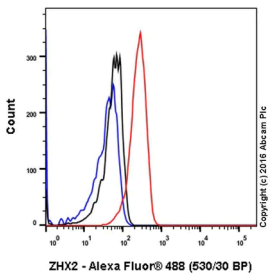
We do not recommend this combination. It is not covered by our product promise.

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.

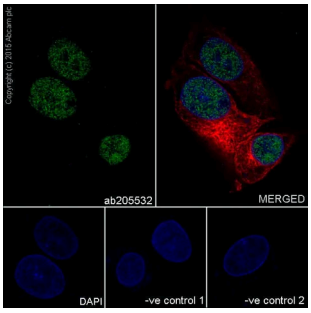
7 product images



Flow Cytometry (Intracellular) - Anti-ZHX2 antibody [EPR17303] (ab205532)

ZHX2 Flow Cytometry (Intracellular) staining using rabbit Anti-ZHX2 antibody

Intracellular Flow Cytometry analysis ofHeLa cells labelling ZHX2 with ab205532 at 1/80 (red). Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/2000) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal IgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.

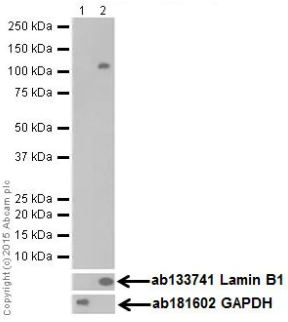


Immunocytochemistry/ Immunofluorescence - Anti-ZHX2 antibody [EPR17303] (ab205532)

ZHX2 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-ZHX2 antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HepG2 (Human liver hepatocellular carcinoma cell line) cells labeling ZHX2 with ab205532 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing nuclear staining on HepG2 cell line. The nuclear counterstain is DAPI (blue).
Tubulin is detected with Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution and Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary antibody at 1/1000 dilution (red).

The negative controls are as follows:-
-ve control 1: - ab205532 at 1/250 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary antibody at 1/1000 dilution.
-ve control 2: - Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.



Western blot - Anti-ZHX2 antibody [EPR17303] (ab205532)

ZHX2 Western blot staining using rabbit Anti-ZHX2 antibody

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-ZHX2 antibody [EPR17303] (ab205532) at 1/2000 dilution

Lane 1:
HeLa cytosolic fraction at 10 µg

Lane 2:

HeLa nuclear fraction at 10 µg

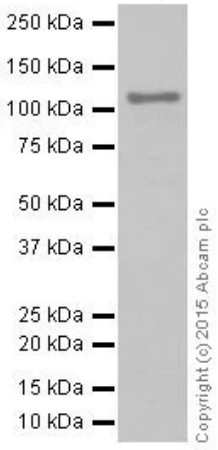
Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 92 kDa

Observed band size: 110 kDa

Exposure time: 3min



Western blot - Anti-ZHX2 antibody [EPR17303] (ab205532)

ZHX2 Western blot staining of Human fetal kidney lysate using rabbit Anti-ZHX2 antibody

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-ZHX2 antibody [EPR17303] (ab205532) at 1/2000 dilution

All lanes:
Human fetal kidney lysate at 10 µg

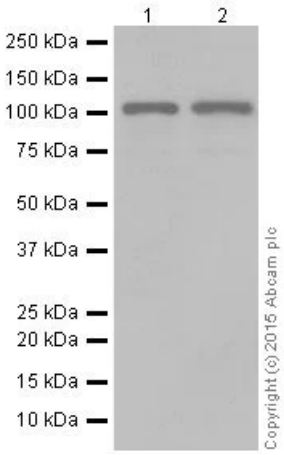
Secondary

All lanes:
Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 92 kDa

Observed band size: 110 kDa

Exposure time: 10s



Western blot - Anti-ZHX2 antibody [EPR17303] (ab205532)

ZHX2 Western blot staining using rabbit Anti-ZHX2 antibody

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-ZHX2 antibody [EPR17303] (ab205532) at 1/2000 dilution

Lane 1:
HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate at 20 µg

Lane 2:
HEK-293 (Human epithelial cells from embryonic kidney) whole cell lysate at 20 µg

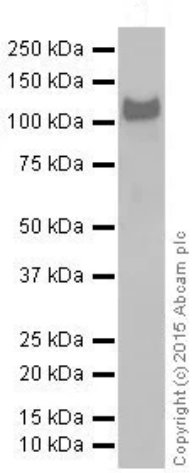
Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 92 kDa

Observed band size: 110 kDa

Exposure time: 1min



Western blot - Anti-ZHX2 antibody [EPR17303] (ab205532)

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-ZHX2 antibody [EPR17303] (ab205532) at 1/2000 dilution

All lanes:
NIH/3T3 (Mouse embryo fibroblast cells) whole cell lysate at 10 µg

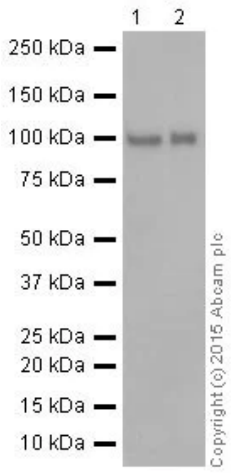
Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 92 kDa

Observed band size: 110 kDa

Exposure time: 30s



Western blot - Anti-ZHX2 antibody [EPR17303] (ab205532)

ZHX2 Western blot staining using rabbit Anti-ZHX2 antibody

Blocking/Dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-ZHX2 antibody [EPR17303] (ab205532) at 1/2000 dilution

Lane 1:
Rat brain lysate at 10 µg

Lane 2:
Rat heart lysate at 10 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 92 kDa

Observed band size: 110 kDa

Exposure time: 3min

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