abcam

ab168383

Anti-FOXF1 antibody [EPR7971]

Anti-FOXF1 antibody [EPR7971] (ab168383) is a rabbit monoclonal antibody detecting FOXF1 in **Western Blot, Flow Cytometry (Intra), ICC/IF**. Suitable for **Human**.

- Biophysical QC for unrivalled batch-batch consistency

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	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	EPR7971
Purification technique	Affinity purification Protein A
Concentration	0.66 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000 - 1/5000

Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/250 - 1/500
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/70 - 1/500
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information FOXF1

Function	Probable transcription activator for a number of lung-specific genes.

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

What is this antibody validated in?
Anti-FOXF1 antibody [EPR7971] (ab168383) is a rabbit recombinant monoclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Intra), Immunocytochemistry/immunofluorescence (ICC/IF) in Human samples.

What is the molecular weight of FOXF1?
Anti-FOXF1 [EPR7971] (ab168383) specifically detects a band for FOXF1 (UniProt: Q12946) at a molecular weight of 40kDa.

Other related products
We have a range of other formats of antibody clone [EPR7971] also available for your convenience: ab168383, Alexa Fluor® 488 - ab214875, Alexa Fluor® 647 - ab215940, Carrier free - ab240153, APC - ab319331, PE - ab319468, Alexa Fluor® 555 - ab319965

Species reactivity
Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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	FOXF1 also known as Forkhead Box F1 is a transcription factor with a molecular mass of approximately 47 kDa. This protein belongs to the forkhead family which is characterized by a distinct forkhead DNA-binding domain. FOXF1 is expressed mainly in the mesenchyme of developing organs such as the lung and gut where it plays an essential role in organogenesis and development.
Biological function summary	FOXF1 regulates gene expression involved in cellular differentiation and embryonic development. It acts as a transcriptional activator binding specific DNA sequences to initiate transcription. FOXF1 does not function in isolation; it forms part of transcriptional complexes by interacting with other regulatory proteins enhancing its role as a transcription factor in specific tissue types. Through these interactions FOXF1 influences the development of organs and tissues.
Pathways	FOXF1 actively participates in the Wnt and Hedgehog signaling pathways both critical for embryonic development and cellular proliferation. In the Wnt pathway FOXF1 interacts with B-catenin a central protein in the pathway to regulate target

gene expression that controls cell differentiation and proliferation. In the Hedgehog pathway FOXF1 modulates gene expression alongside transcription factors such as GLI proteins controlling various developmental processes.

Associated diseases and disorders

FOXF1 mutations or dysregulation have strong associations with congenital diaphragmatic hernia and alveolar capillary dysplasia both of which are severe developmental conditions. FOXF1 dysregulation disrupts normal lung and diaphragm development linking it to these disorders. Additionally the Hedgehog pathway where FOXF1 plays a role involves GLI proteins tying FOXF1 indirectly to certain developmental syndromes when mutations are present.

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

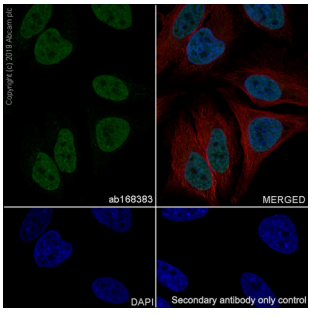
We do not recommend this combination. It is not covered by our product promise.

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

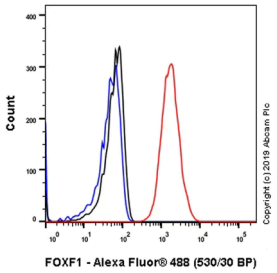


Immunocytochemistry/ Immunofluorescence - Anti-FOXF1 antibody [EPR7971] (ab168383)

FOXF1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-FOXF1 antibody

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling FOXF1 with purified ab168383 at 1:250 dilution (2.7 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200

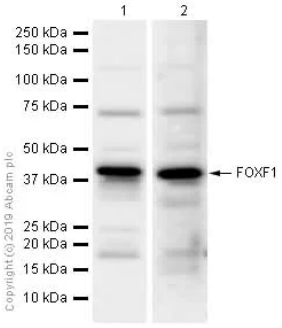
(2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Flow Cytometry (Intracellular) - Anti-FOXF1 antibody [EPR7971] (ab168383)

FOXF1 Flow Cytometry (Intracellular) staining using rabbit Anti-FOXF1 antibody

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling FOXF1 with purified ab168383 at 1/70 dilution (10 µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Western blot - Anti-FOXF1 antibody [EPR7971] (ab168383)

FOXF1 Western blot staining using rabbit Anti-FOXF1 antibody

This antibody detects high background
All lanes:
Western blot - Anti-FOXF1 antibody [EPR7971] (ab168383) at 1/5000 dilution

Lane 1:
HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates at 15 µg

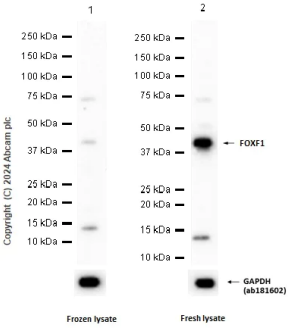
Lane 2:
Human lung lysates at 15 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 40 kDa

Observed band size: 40 kDa



Western blot - Anti-FOXF1 antibody [EPR7971] (ab168383)

We recommend using freshly made lysate in western blot testing to get stronger band and avoid high background.
All lanes:
Western blot - Anti-FOXF1 antibody [EPR7971] (ab168383) at 1/1000 dilution

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

Lane 2:
Fresh HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Exposure time: 60s

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