

Anti-FOXA2 Antibody [JM10-64] - BSA and Azide free

HA751839



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat, Cynomolgus monkey, Pig
Applications:	WB, IF-Cell, IHC-P, IHC-Fr, IF-Tissue
Molecular Wt:	Predicted band size: 48 kDa
Clone number:	JM10-64

Description: Transcription factor that is involved in embryonic development, establishment of tissue-specific gene expression and regulation of gene expression in differentiated tissues. Is thought to act as a 'pioneer' factor opening the compacted chromatin for other proteins through interactions with nucleosomal core histones and thereby replacing linker histones at target enhancer and/or promoter sites. Binds DNA with the consensus sequence 5'-[AC]A[AT]T[AG]TT[GT][AG][CT]T[CT]-3' (By similarity). In embryonic development is required for notochord formation. Involved in the development of multiple endoderm-derived organ systems such as the liver, pancreas and lungs; FOXA1 and FOXA2 seem to have at least in part redundant roles. Originally described as a transcription activator for a number of liver genes such as AFP, albumin, tyrosine aminotransferase, PEPCK, etc. Interacts with the cis-acting regulatory regions of these genes. Involved in glucose homeostasis; regulates the expression of genes important for glucose sensing in pancreatic beta-cells and glucose homeostasis. Involved in regulation of fat metabolism. Binds to fibrinogen beta promoter and is involved in IL6-induced fibrinogen beta transcriptional activation.

Immunogen:	Synthetic peptide within human FOXA2 aa 1-50/457.
Positive control:	HT-29 cell lysate, A549 cell lysate, HepG2 cell lysate, mouse liver tissue, rat liver tissue, HT-29.
Subcellular location:	Nucleus. Cytoplasm.
Database links:	SwissProt: Q9Y261 Human P35583 Mouse P32182 Rat
Recommended Dilutions:	
WB	1:1,000
IF-Cell	1:100
IHC-P	1:1,000
IHC-Fr	1:500
IF-Tissue	1:500
Storage Buffer:	1*PBS (pH7.4).
Storage Instruction:	Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.
Purity:	Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

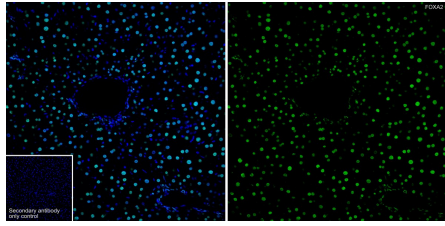
Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

 华安生物
HUABIO
www.huabio.cn

Images

**Fig1:** Application: IHC-Fr

Species: Mouse

Site: Liver

Sample: Frozen section

Antibody concentration: 1/500

Antigen retrieval: The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for about 2 minutes in microwave oven.

Fig2: Application: IHC-Fr

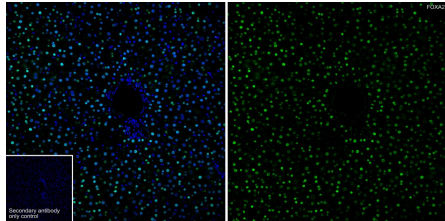
Species: Rat

Site: Liver

Sample: Frozen section

Antibody concentration: 1/500

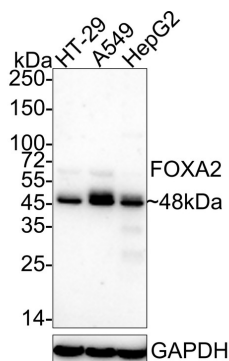
Antigen retrieval: The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for about 2 minutes in microwave oven.

**Fig3:** Western blot analysis of FOXA2 on different lysates with Rabbit anti-FOXA2 antibody (HA751839) at 1/1,000 dilution.

Lane 1: HT-29 cell lysate

Lane 2: A549 cell lysate

Lane 3: HepG2 cell lysate



Lysates/proteins at 20 µg/Lane.

Predicted band size: 48 kDa

Observed band size: 48 kDa

Exposure time: 2 minutes; ECL: K1802;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDN/TBST for 1 hour at room temperature. The primary antibody (HA751839) at 1/1,000 dilution was used in 5% NFDN/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn

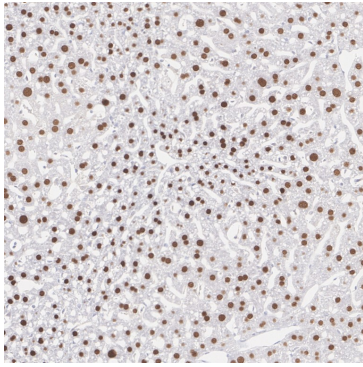


Fig4: Immunohistochemical analysis of paraffin-embedded mouse liver tissue with Rabbit anti-FOXA2 antibody (HA751839) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA751839) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

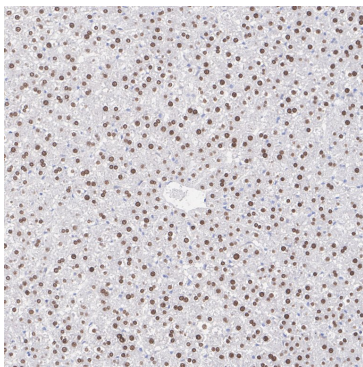
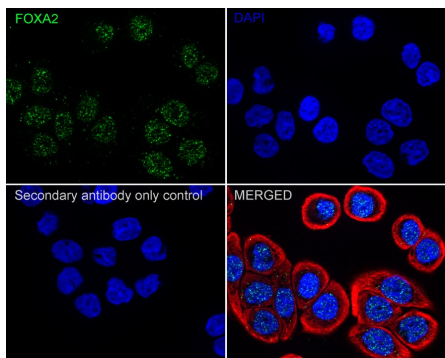


Fig5: Immunohistochemical analysis of paraffin-embedded rat liver tissue with Rabbit anti-FOXA2 antibody (HA751839) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA751839) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Fig6: Immunocytochemistry analysis of HT-29 cells labeling FOXA2 with Rabbit anti-FOXA2 antibody (HA751839) at 1/100 dilution.



Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-FOXA2 antibody (HA751839) at 1/100 dilution in 1% BSA in PBST overnight at 4 °C. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/100 dilution overnight at +4 °C. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

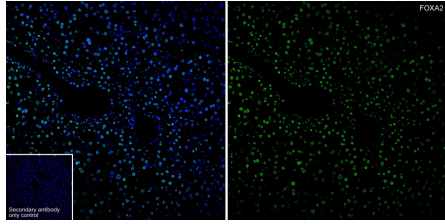


Fig7: Application: IF-Tissue

Species: Mouse

Site: liver

Sample: Paraffin-embedded section

Antibody concentration: 1/500

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Gao Y et al. Uterine epithelial cell proliferation and endometrial hyperplasia: evidence from a mouse model. *Mol Hum Reprod* 20:776-86 (2014).
2. Fu Y et al. Rapid generation of functional hepatocyte-like cells from human adipose-derived stem cells. *Stem Cell Res Ther* 7:105 (2016).

Hangzhou Huan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn