




Product datasheet

Anti-FOXA1 antibody ab5089

★★★★★ [2 Abreviews](#) [80 References](#) [4 Images](#)

Overview

Product name	Anti-FOXA1 antibody
Description	Goat polyclonal to FOXA1
Host species	Goat
Tested applications	Suitable for: WB, ICC
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat, Cow, Pig, Xenopus laevis, Zebrafish 
Immunogen	Synthetic peptide corresponding to Human FOXA1 aa 462-472 (C terminal). Sequence: C-GVYSRPVLNTS Database link: P55317 (Peptide available as ab23074)  Run BLAST with  Run BLAST with
Positive control	WB: HepG2 and MCF7 nuclear cell lysates; Mouse liver lysate. ICC: MCF7 and U2OS cells.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.3 Preservative: 0.02% Sodium azide Constituents: Tris buffered saline, 0.5% BSA
Purity	Ammonium Sulphate Precipitation

Purification notes	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.
Clonality	Polyclonal
Isotype	IgG

Applications

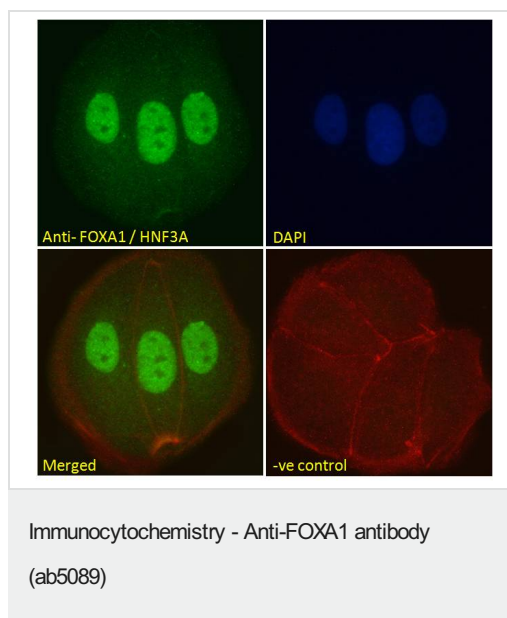
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab5089 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (1)	Use a concentration of 0.1 - 0.3 µg/ml. Detects a band of approximately 50 kDa (predicted molecular weight: 49.1 kDa). A 1 hour primary incubation at room temperature is recommended for this product. An additional band of unknown identity was also consistently observed at 37kDa. This band was successfully blocked by incubation with the immunizing peptide.
ICC		Use a concentration of 10 µg/ml.

Target

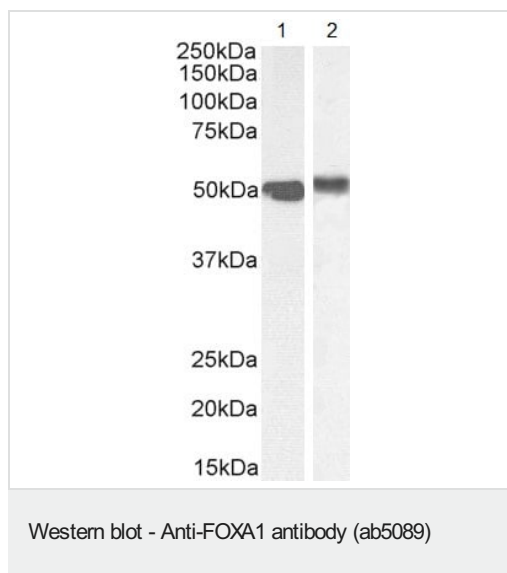
Function	Transcription factor that is involved in embryonic development, establishment of tissue-specific gene expression and regulation of gene expression in differentiated tissues. Is thought to act as a 'pioneer' factor opening the compacted chromatin for other proteins through interactions with nucleosomal 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). Proposed to play a role in translating the epigenetic signatures into cell type-specific enhancer-driven transcriptional programs. Its differential recruitment to chromatin is dependent on distribution of histone H3 methylated at 'Lys-5' (H3K4me2) in estrogen-regulated genes. Involved in the development of multiple endoderm-derived organ systems such as liver, pancreas, lung and prostate; FOXA1 and FOXA2 seem to have at least in part redundant roles (By similarity). Modulates the transcriptional activity of nuclear hormone receptors. Is involved in ESR1-mediated transcription; required for ESR1 binding to the NKX2-1 promoter in breast cancer cells; binds to the RPRM promoter and is required for the estrogen-induced repression of RPRM. Involved in regulation of apoptosis by inhibiting the expression of BCL2. Involved in cell cycle regulation by activating expression of CDKN1B, alone or in conjunction with BRCA1. 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.
Tissue specificity	Highly expressed in prostate and ESR1-positive breast tumors. Overexpressed in esophageal and lung adenocarcinomas.
Sequence similarities	Contains 1 fork-head DNA-binding domain.
Cellular localization	Nucleus.

Images



Immunofluorescent analysis of paraformaldehyde-fixed, 0.15% TritonX-100 permeabilized MCF7 (Human breast adenocarcinoma cell line) cells labeling FOXA1 with ab5089 at 10 ug/ml (1h). Image showing nuclear staining in MCF7 cells. An Alexa Fluor 488[®] secondary antibody was used at 2 ug/ml. Actin filaments were stained with phalloidin (red) and the nuclear stain is DAPI (blue).

Secondary antibody only control: Unimmunized goat IgG (10 ug/ml) followed by an Alexa Fluor 488[®] secondary antibody at 2ug/ml.



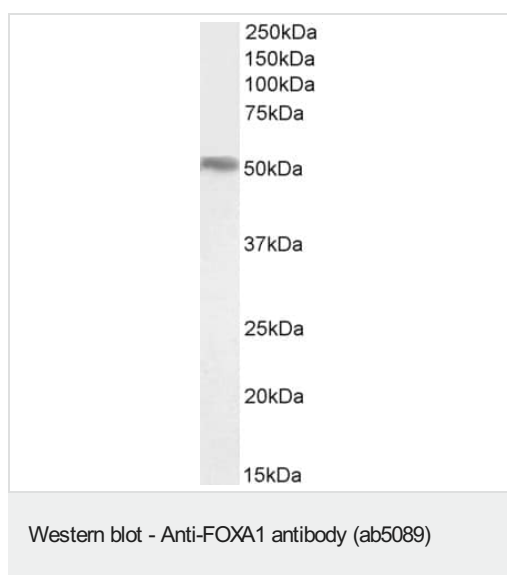
Lane 1 : Anti-FOXA1 antibody (ab5089) at 0.1 µg/ml
Lane 2 : Anti-FOXA1 antibody (ab5089) at 0.3 µg/ml

Lane 1 : HepG2 (Human liver hepatocellular carcinoma cell line) nuclear cell lysate
Lane 2 : MCF7 (Human breast adenocarcinoma cell line) nuclear cell lysate

Lysates/proteins at 35 µg per lane.

Predicted band size: 49.1 kDa

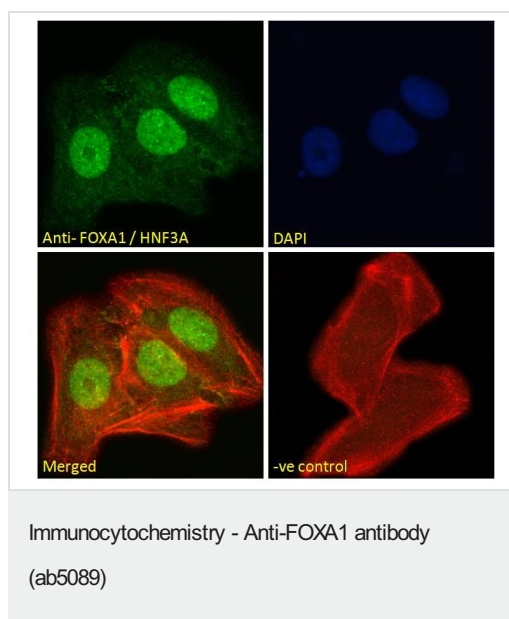
Western blot analysis labeling FOXA1 with ab5089.



Anti-FOXA1 antibody (ab5089) at 0.1 µg/ml + Mouse liver lysate at 35 µg

Predicted band size: 49.1 kDa

Western blot labeling FOXA1 with ab5089 at 0.1 ug/ml.



Immunofluorescent analysis of paraformaldehyde-fixed, 0.15% TritonX-100 permeabilized U-2 OS (Human bone osteosarcoma epithelial cell line) cells labeling FOXA1 with ab5089 at 10 ug/ml (1h). Image showing nuclear staining in U-2 OS cells. An Alexa Fluor 488[®] secondary antibody was used at 2 ug/ml. Actin filaments were stained with phalloidin (red) and the nuclear stain is DAPI (blue).

Secondary antibody only control: Unimmunized goat IgG (10 ug/ml) followed by an Alexa Fluor 488[®] secondary antibody at 2ug/ml.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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