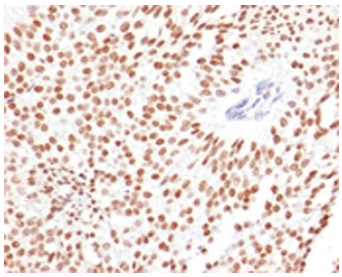
FOXA1 Antibody [clone FHBA1-1] (V7225)

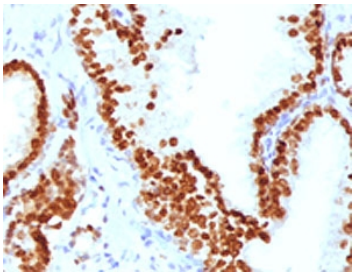
Catalog No.	Formulation	Size
V7225-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7225-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7225SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

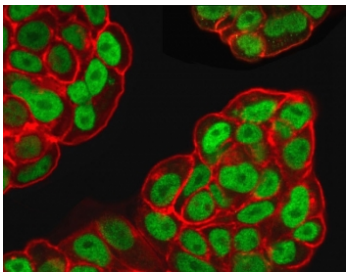
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	FHBA1-1
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	3169
Localization	Nuclear
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT Flow cytometry: 1-2ug/million cells Immunofluorescence: 2-4ug/ml Western blot: 1-2ug/ml
Limitations	This FOXA1 antibody is available for research use only.



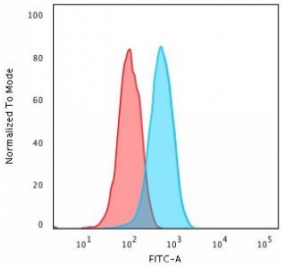
FOXA1 Antibody Human Bladder Carcinoma IHC. Immunohistochemical staining of FFPE human bladder carcinoma tissue using FOXA1 Antibody (clone FHBA1-1) demonstrates strong nuclear HRP-DAB brown staining throughout malignant epithelial cell populations. The staining pattern is consistent with expression of FOXA1, a forkhead family transcription factor that functions as a developmental regulator of gene expression, epithelial differentiation, and tissue-specific transcriptional programs. The predominantly nuclear localization is characteristic of a DNA-binding transcription factor and supports the role of FOXA1 in maintaining epithelial cellular identity and regulating lineage-specific gene expression networks. Staining of FFPE tissue is enhanced by boiling sections in 10 mM Tris with 1 mM EDTA, pH 9 for 10-20 minutes followed by cooling at room temperature for 20 minutes.



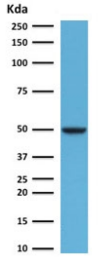
FOXA1 Antibody Human Prostate Carcinoma IHC. Immunohistochemical staining of FFPE human prostate carcinoma tissue using FOXA1 Antibody (clone FHBA1-1) demonstrates strong nuclear HRP-DAB brown staining within malignant epithelial cell populations. The staining pattern is consistent with expression of FOXA1, a forkhead family transcription factor that functions as a developmental regulator of gene expression, epithelial differentiation, and tissue-specific transcriptional programs. The prominent nuclear localization is characteristic of a DNA-binding transcription factor and supports the role of FOXA1 in maintaining epithelial lineage identity and regulating gene networks associated with cellular differentiation and tissue development. Staining of FFPE tissue is enhanced by boiling sections in 10 mM Tris with 1 mM EDTA, pH 9 for 10-20 minutes followed by cooling at room temperature for 20 minutes.



FOXA1 Antibody MCF7 Cell IF. Immunofluorescent staining of PFA-fixed human MCF7 cells using FOXA1 Antibody (clone FHBA1-1) demonstrates strong green nuclear staining consistent with localization of FOXA1, a forkhead family transcription factor that regulates developmental gene expression, epithelial differentiation, and tissue-specific transcriptional programs. The predominantly nuclear staining pattern is characteristic of a DNA-binding transcriptional regulator and supports the role of FOXA1 in controlling gene networks that govern cellular identity, lineage specification, and differentiated epithelial phenotypes. Phalloidin (red) labels the actin cytoskeleton and outlines cellular morphology, providing structural contrast to the nuclear localization of FOXA1.



FOXA1 Antibody MCF-7 Cell FACS. Flow cytometry analysis of PFA-fixed human MCF-7 cells using FOXA1 Antibody (clone FHBA1-1) demonstrates a distinct rightward shift of the FOXA1-positive population (blue) relative to the isotype control (red), consistent with expression of FOXA1. FOXA1 is a forkhead family transcription factor and pioneer regulator that controls developmental gene expression, epithelial differentiation, chromatin accessibility, and tissue-specific transcriptional programs. As a developmental transcription factor, FOXA1 plays a central role in establishing cellular identity and maintaining differentiated epithelial phenotypes through regulation of lineage-specific gene expression networks. Red=isotype control; Blue=FOXA1 antibody.



FOXA1 Antibody HeLa Cell WB. Western blot analysis of human HeLa cell lysate using FOXA1 Antibody (clone FHBA1-1) demonstrates a distinct band at approximately 49 kDa, consistent with the predicted molecular weight of FOXA1. FOXA1 is a forkhead family transcription factor and pioneer regulator that facilitates chromatin accessibility and controls developmental gene expression programs involved in organogenesis, epithelial differentiation, and tissue-specific cellular identity. Detection of the expected molecular weight band supports expression of FOXA1 and its role as a developmental transcription factor that coordinates lineage-specific transcriptional networks and differentiated cellular phenotypes.

Description

FOXA1 Antibody specifically detects the transcription factor Forkhead-box A1, also known as hepatocyte nuclear factor 3-alpha, a member of the FOX class of transcription factors. HNF-1 (alpha and beta), HNF-3 (alpha, beta and gamma), HNF-4 (alpha and gamma), and HNF-6 compose, in part, a homeoprotein family designated the hepatocyte nuclear factor family. The various HNF-1 isoforms regulate transcription of genes in the liver as well as in other tissues such as kidney, small intestine and thymus. FOXA1 is expressed in normal breast ductal epithelium and other epithelium in different organs, such as lung, pancreas, bladder, prostate, and colon. Recently, FOXA1 has been shown to be a major determinant of estrogen-ER activity and endocrine response in breast cancer cells. Its expression correlates with estrogen receptor (ER)-positivity, especially in luminal subtype A breast cancers, which is associated with favorable prognosis. FOXA1 is useful in the sub-classification of breast carcinomas.

Learn more about FOXA1 function in developmental gene regulation, organogenesis, epithelial differentiation, and tissue-specific transcriptional control on our FOXA1 Antibody page.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the FOXA1 antibody to be titered up or down for optimal performance.

Immunogen

A human partial recombinant protein corresponding to amino acids 372-472 was used as the immunogen for this FOXA1 antibody.

Storage

Store the FOXA1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

References (1)

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