



### **FOX A1 Antibody**

Mouse Monoclonal Antibody (Mab)
Catalog # AD80238

## **Specification**

#### **FOX A1 Antibody - Product info**

Application IHC
Primary Accession P55317
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 49148

### FOX A1 Antibody - Additional info

Gene ID 3169
Gene Name FOXA1

**Other Names** 

Hepatocyte nuclear factor 3-alpha, HNF-3-alpha, HNF-3A, Forkhead box protein A1, Transcription factor 3A, TCF-3A, FOXA1, HNF3A, TCF3A

**Dilution** 

IHC~~Ready-to-use

Storage

Maintain refrigerated at 2-8°C

Precautions FOX A1 Antibody is for research use only

and not for use in diagnostic or

therapeutic procedures.

## **FOX A1 Antibody - Protein Information**

Name FOXA1

Synonyms HNF3A, TCF3A

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'





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. Nucleus {ECO:0000255|PROSITE-ProRule:PRU00089, ECO:0000269|PubMed:15987773. ECO:0000269|PubMed:16331276} Highly expressed in prostate and **ESR1**-positive breast tumors. Overexpressed in esophageal and lung

(By similarity). Proposed to play a role in translating the epigenetic signatures into

cell type-specific enhancer-driven

Cellular Location

Tissue Location

#### **FOX A1 Antibody - Protocols**

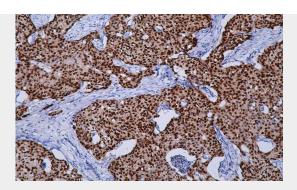
Provided below are standard protocols that you may find useful for product applications.

adenocarcinomas.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# FOX A1 Antibody - Images





Immunohistochemical analysis of paraffin-embedded breast cancer tissue using AD80238 performed on the Abcarta® FAIP-30 Fully automated IHC platform. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(Ready-to-use) for 15 min at room temperature. AmpSeeTM Detection Systems Abcepta: AR005 was used as the secondary antibody.