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FOXA1 Antibody (Internal)
Rabbit Polyclonal Antibody
Catalog # ALS16749

Specification

FOXA1 Antibody (Internal) - Product Information

Application	**IHC, WB**
Primary Accession	P55317
Other Accession	3169
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**49148**

FOXA1 Antibody (Internal) - Additional Information

Gene ID 3169

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

Target/Specificity
Multiple isoforms of FOXA1 exists as a result of alternative splicing event.

Reconstitution & Storage
PBS, 0.02% sodium azide. Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions
FOXA1 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

FOXA1 Antibody (Internal) - 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' (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.

Cellular Location
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00089, ECO:0000269|PubMed:15987773, ECO:0000269|PubMed:16331276}

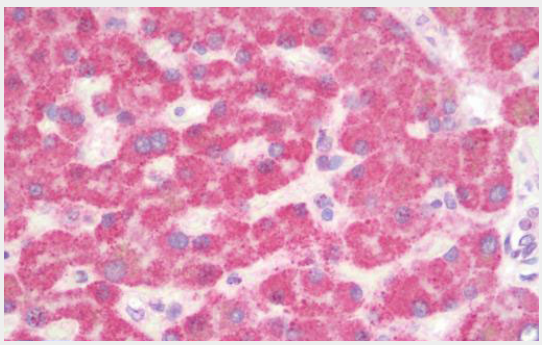
Tissue Location
Highly expressed in prostate and ESR1-positive breast tumors. Overexpressed in esophageal and lung adenocarcinomas

FOXA1 Antibody (Internal) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

FOXA1 Antibody (Internal) - Images



Anti-FOXA1 antibody IHC staining of human liver.

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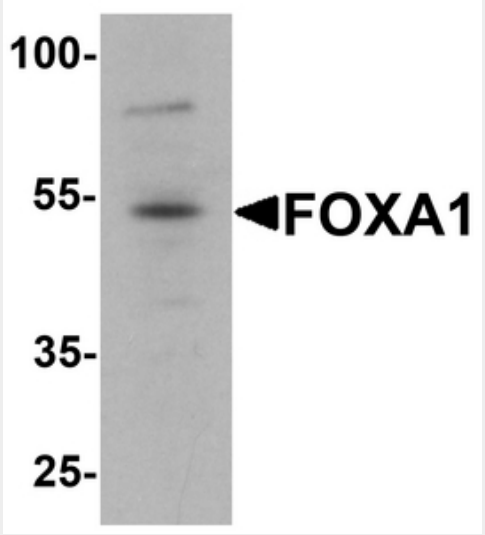

Western blot analysis of FOXA1 in 293 cell lysate with FOXA1 antibody at 1 ug/ml

FOXA1 Antibody (Internal) - Background

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FOXA1 Antibody (Internal) - References

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Navas M.A.,et al.Hum. Hered. 50:370-381(2000).
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