

FOXA1 Antibody (Center S286)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14791c**Specification**

FOXA1 Antibody (Center S286) - Product Information

Application	WB,E
Primary Accession	P55317
Other Accession	NP_004487.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	49148
Antigen Region	270-298

FOXA1 Antibody (Center S286) - Additional Information**Gene ID** 3169**Other Names**

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

Target/Specificity

This FOXA1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 270-298 amino acids from the Central region of human FOXA1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

FOXA1 Antibody (Center S286) is for research use only and not for use in diagnostic or therapeutic procedures.

FOXA1 Antibody (Center S286) - 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}

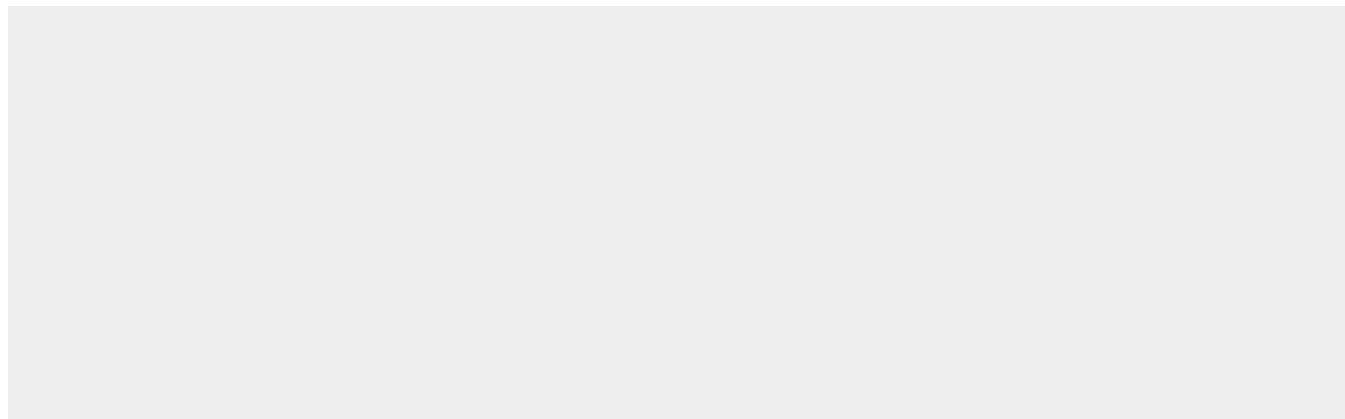
Tissue Location

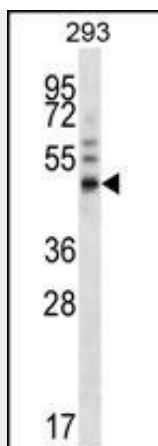
Highly expressed in prostate and ESR1-positive breast tumors. Overexpressed in esophageal and lung adenocarcinomas

FOXA1 Antibody (Center S286) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

FOXA1 Antibody (Center S286) - Images



FOXA1 Antibody (Center S286) (Cat. #AP14791c) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the FOXA1 antibody detected the FOXA1 protein (arrow).

FOXA1 Antibody (Center S286) - Background

This gene encodes a member of the forkhead class of DNA-binding proteins. These hepatocyte nuclear factors are transcriptional activators for liver-specific transcripts such as albumin and transthyretin, and they also interact with chromatin. Similar family members in mice have roles in the regulation of metabolism and in the differentiation of the pancreas and liver.

FOXA1 Antibody (Center S286) - References

Hu, D.G., et al. Mol. Pharmacol. 78(4):714-722(2010)
Zhang, Y., et al. J. Biol. Chem. 285(37):28604-28613(2010)
Bernardo, G.M., et al. Development 137(12):2045-2054(2010)
Liu, N., et al. Zhonghua Yi Xue Za Zhi 90(20):1403-1407(2010)
Song, Y., et al. Cancer Res. 70(5):2115-2125(2010)