10320 Camino Santa Fe, Suite A
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

FOXA1 Antibody (Center D159) (Ascites)

Mouse Monoclonal Antibody (Mab)
Catalog # AM2103a

Specification

FOXA1 Antibody (Center D159) (Ascites) - Product Information

Application	**WB,E**
Primary Accession	P55317
Other Accession	P23512, P35582, NP_004487
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**49148**
Antigen Region	**143-171**

FOXA1 Antibody (Center D159) (Ascites) - 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 mice immunized with a KLH conjugated synthetic peptide between 143-171 amino acids from the Central region of human FOXA1.

Dilution
WB~~1:500~1000
E~~Use at an assay dependent concentration.

Format
Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.

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 D159) (Ascites) is for research use only and not for use in diagnostic or therapeutic procedures.

FOXA1 Antibody (Center D159) (Ascites) - 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 D159) (Ascites) - 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 (Center D159) (Ascites) - Images

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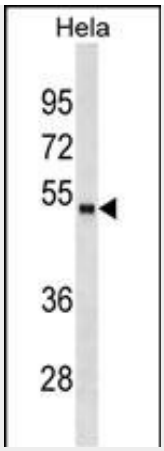

FOXA1 Antibody (Center D159)(Ascites)(Cat. #AM2103a) western blot analysis in Hela cell line lysates (35µg/lane).This demonstrates the FOXA1 antibody detected the FOXA1 protein (arrow).

FOXA1 Antibody (Center D159) (Ascites) - 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 D159) (Ascites) - 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)