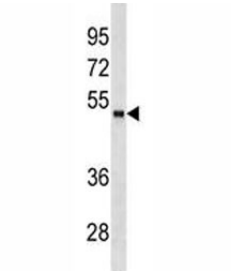
FOXA1 Antibody [clone 596CT18.4.3] (F53685)

Catalog No.	Formulation	Size
F53685-0.1ML	In ascites with 0.09% sodium azide	0.1 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Mouse, Rat
Format	Ascites
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1
Clone Name	596CT18.4.3
Purity	Ascites
UniProt	P55317
Applications	Western Blot : 1:100-1:200
Limitations	This FOXA1 antibody is available for research use only.



FOXA1 antibody western blot analysis in HeLa lysate. Predicted molecular weight: ~49 kDa.

Description

FOXA1 is a 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 promter 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. [UniProt]

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

Application Notes

Titration of the FOXA1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 143-171 from the human protein was used as the immunogen for this FOXA1 antibody.

Storage

Aliquot the FOXA1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.