

ARG41687
anti-FOXA1 / HNF3A antibody [FOXA1/1512]Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [FOXA1/1512] recognizes FOXA1 / HNF3A
Tested Reactivity	Hu
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Clone	FOXA1/1512
Isotype	IgG1, kappa
Target Name	FOXA1 / HNF3A
Species	Human
Immunogen	Partial recombinant protein corresponding to aa. 372-472 of Human FOXA1 / HNF3A.
Conjugation	Un-conjugated
Alternate Names	TCF3A; Forkhead box protein A1; Hepatocyte nuclear factor 3-alpha; TCF-3A; HNF-3A; HNF-3-alpha; HNF3A; Transcription factor 3A

Application Instructions

Application table	Application	Dilution
	FACS	0.5 - 1 µg/10 ⁶ cells
	ICC/IF	1 - 5 µg/ml
	IHC-P	1 - 5 µg/ml
	WB	0.5 - 1 µg/ml
Application Note	IHC-P: Antigen Retrieval: Boil tissue section in 10 mM Tris with 1 mM EDTA (pH 9.0) for 10-20 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HeLa	
Observed Size	~ 50 kDa	

Properties

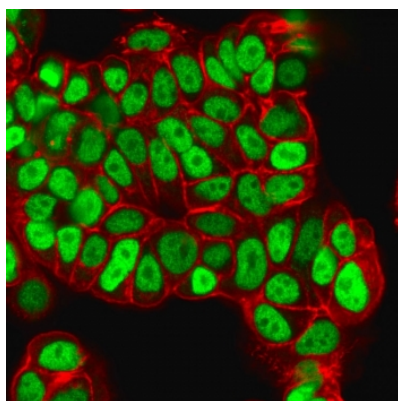
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.05% Sodium azide and 0.1 mg/ml BSA.
Preservative	0.05% Sodium azide

Stabilizer	0.1 mg/ml BSA
Concentration	0.2 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

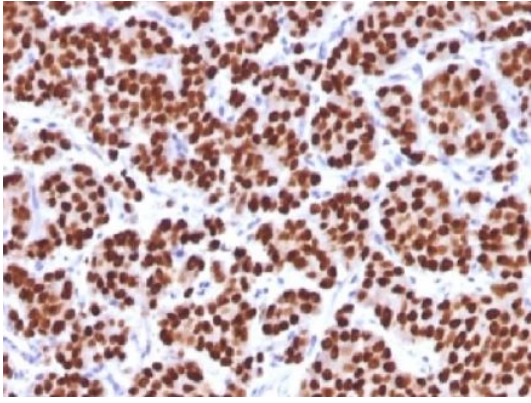
Gene Symbol	FOXA1
Gene Full Name	forkhead box A1
Background	This gene encodes a member of the forkhead class of DNA-binding proteins. These hepatocyte nuclear factors are transcriptional activators for liver-specific transcripts such as albumin and transthyretin, and they also interact with chromatin. Similar family members in mice have roles in the regulation of metabolism and in the differentiation of the pancreas and liver. [provided by RefSeq, Jul 2008]
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. [UniProt]
Calculated Mw	49 kDa
Cellular Localization	Nucleus. [UniProt]

Images



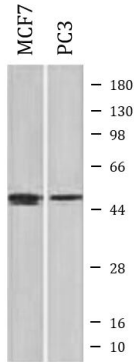
ARG41687 anti-FOXA1 / HNF3A antibody [FOXA1/1512] ICC/IF image

Immunofluorescence: PFA-fixed MCF7 cells stained with ARG41687 anti-FOXA1 / HNF3A antibody [FOXA1/1512] (green) and Phalloiden (red).



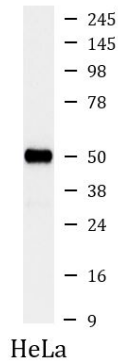
ARG41687 anti-FOXA1 / HNF3A antibody [FOXA1/1512] IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human prostate carcinoma tissue stained with ARG41687 anti-FOXA1 / HNF3A antibody [FOXA1/1512]. Antigen Retrieval: Boil tissue section in 10 mM Tris with 1 mM EDTA (pH 9.0), for 10-20 min.



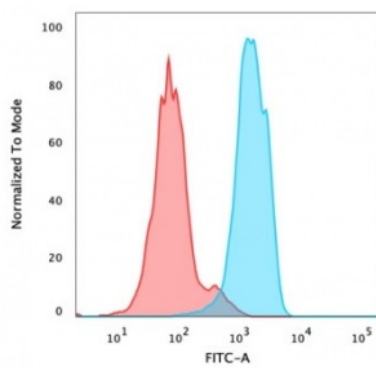
ARG41687 anti-FOXA1 / HNF3A antibody [FOXA1/1512] WB image

Western blot: MCF7 and PC3 cell lysates stained with ARG41687 anti-FOXA1 / HNF3A antibody [FOXA1/1512].



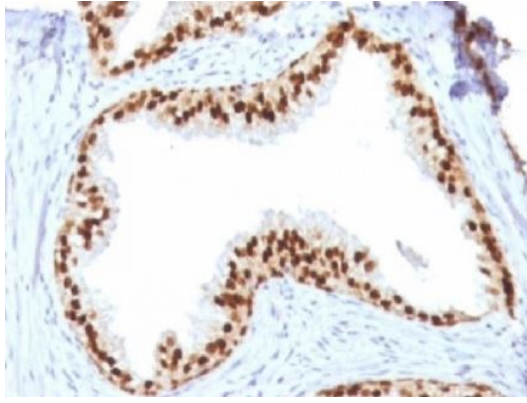
ARG41687 anti-FOXA1 / HNF3A antibody [FOXA1/1512] WB image

Western blot: HeLa cell lysate stained with ARG41687 anti-FOXA1 / HNF3A antibody [FOXA1/1512].



ARG41687 anti-FOXA1 / HNF3A antibody [FOXA1/1512] FACS image

Flow Cytometry: PFA-fixed MCF7 cells stained with ARG41687 anti-FOXA1 / HNF3A antibody [FOXA1/1512] (blue); Isotype control (red).



ARG41687 anti-FOXA1 / HNF3A antibody [FOXA1/1512] IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human prostate tissue stained with ARG41687 anti-FOXA1 / HNF3A antibody [FOXA1/1512]. Antigen Retrieval: Boil tissue section in 10 mM Tris with 1 mM EDTA (pH 9.0), for 10-20 min.