

# FOXA1 Rabbit mAb

Catalog # AP75449

#### **Product Information**

ApplicationWB, ICCPrimary AccessionP55317ReactivityHuman, RatHostRabbit

**Clonality** Monoclonal Antibody

Calculated MW 49148

### **Additional Information**

**Gene ID** 3169

Other Names FOXA1

**Dilution** WB~~1/500-1/1000 ICC~~N/A

Format 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and

0.05% BSA.

**Storage** Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

# **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.

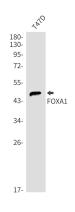
Cellular Location Nucleus {ECO:0000255 | PROSITE-ProRule:PRU00089,

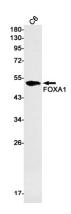
ECO:0000269 | PubMed:15987773, ECO:0000269 | PubMed:16331276}

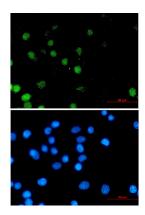
**Tissue Location** Highly expressed in prostate and ESR1-positive breast tumors. Overexpressed

in esophageal and lung adenocarcinomas

# **Images**







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