

FOXA1 Recombinant antibody, PBS Only

Catalog Number: 85125-6-PBS

Basic Information

Catalog Number:

85125-6-PBS

Concentration:

1 mg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG14243

GenBank Accession Number:

BC033890

GeneID (NCBI):

3169

UNIPROT ID:

P55317

Full Name:

forkhead box A1

Calculated MW:

473 aa, 49 kDa

Observed MW:

50 kDa

Purification Method:

Protein A purification

CloneNo.:

242658F9

Applications

Tested Applications:

WB, IF/ICC, Indirect ELISA

Species Specificity:

human

Background Information

Forkhead box A1(FOXA1),also named hepatocyte nuclear factor 3-alpha (HNF-3A), 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 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.

Storage

Storage:

Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:

PBS Only

For technical support and original validation data for this product please contact:

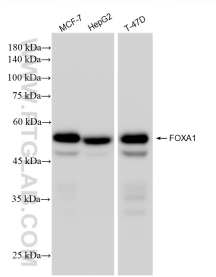
T: 4006900926

E: Proteintech-CN@ptglab.com

W: ptgcn.com

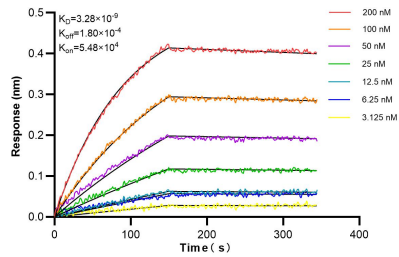
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Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 85125-6-RR (FOXA1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 85125-6-PBS in a different storage buffer formulation.

Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using FOXA1 antibody (85125-6-RR, Clone: 242658F9) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 85125-6-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 85125-6-RR against Human FOXA1 were performed. The affinity constant is 3.28 nM.