For Research Use Only

CoraLite® Plus 488-conjugated FOXA1 Recombinant monoclonal antibody

Catalog Number:CL488-85125-6

proteintech®
Antibodies | ELISA kits | Proteins
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Basic Information

Catalog Number:
CL488-85125-6

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

Recommended Dilutions:
IF/ICC: 1:50-1:500

Excitation/Emission maxima wavelengths:
493 nm / 522 nm

Applications

Tested Applications:
IF/ICC

Species Specificity:
human

Positive Controls:

IF/ICC : MCF-7 cells,

Background Information

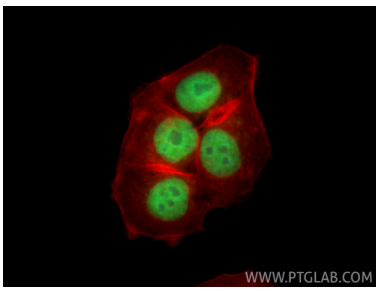
Forkhead box A1(FOXA1),also named hepatocyte nuclear factor 3-alpha (HNF-3A), is a transcription factor that is involved in embryonic development, establishment of tissue-specific gene expression and regulation of gene expression in differentiated tissues. Is thought to act as a 'pioneer' factor opening 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 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 discribed 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 -20°C. Avoid exposure to light. Stable for one year after shipment.
Storage Buffer:
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using CoraLite® Plus 488 FOXA1 antibody (CL488-85125-6, Clone: 242658F9) at dilution of 1:200, CL594-phalloidin (red).