

Datasheet for ABIN5557466

anti-FOXA1 antibody**3** Images[Go to Product page](#)

Overview

| | |
|--------------|---|
| Quantity: | 100 µL |
| Target: | FOXA1 |
| Reactivity: | Human, Rat, Mouse |
| Host: | Rabbit |
| Clonality: | Monoclonal |
| Conjugate: | This FOXA1 antibody is un-conjugated |
| Application: | Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (Cultured Cells) (IF (cc)) |

Product Details

| | |
|-------------------|---------------------------------|
| Immunogen: | Recombinant human FOXA1 protein |
| Clone: | 5F7 |
| Isotype: | IgG |
| Cross-Reactivity: | Human, Mouse, Rat |
| Purification: | Purified by Protein A. |

Target Details

| | |
|-------------------|--|
| Target: | FOXA1 |
| Alternative Name: | FOXA1 (FOXA1 Products) |
| Background: | Synonyms: HNF3A, TCF3A, Hepatocyte nuclear factor 3-alpha, HNF-3-alpha, HNF-3A, Forkhead |

Target Details

box protein A1, Transcription factor 3A, TCF-3A, FOXA1

Background: 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.

Gene ID: 3169

UniProt: [P55317](#)

Pathways: [Intracellular Steroid Hormone Receptor Signaling Pathway](#), [Regulation of Intracellular Steroid Hormone Receptor Signaling](#), [Carbohydrate Homeostasis](#)

Application Details

Application Notes: WB 1:300-5000
IHC-P 1:200-400
IF(ICC) 1:50-200

Restrictions: For Research Use only

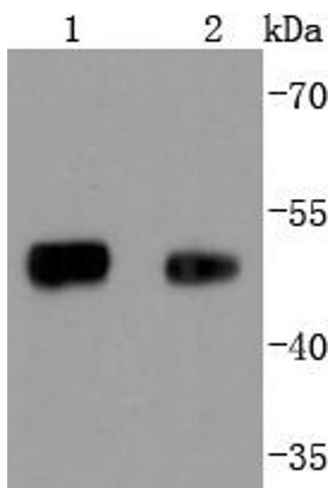
Handling

Format: Liquid

Handling

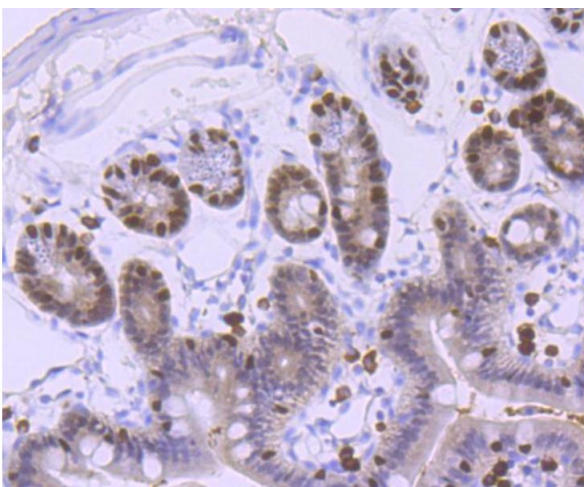
| | |
|--------------------|--|
| Concentration: | 1 µg/µL |
| Buffer: | Aqueous buffered solution containing 1xTBS (pH 7.4), 1 % BSA, 40 %Glycerol and 0.05 % Sodium Azide. |
| Preservative: | ProClin |
| Precaution of Use: | This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only. |
| Storage: | 4 °C,-20 °C |
| Storage Comment: | Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles. |
| Expiry Date: | 12 months |

Images



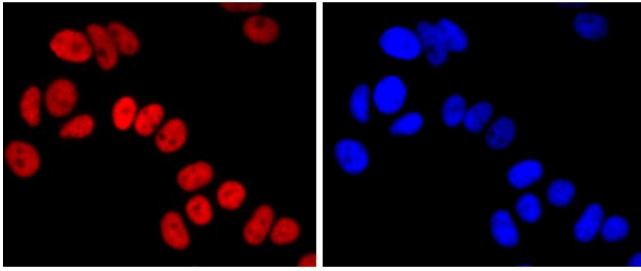
Western Blotting

Image 1. Lane 1: 293 lysates, Lane 2: Mouse lung lysates probed with FOXA1 (5F7) Monoclonal Antibody at 1:1000 overnight at 4°C. Followed by a conjugated secondary antibody.



Immunohistochemistry (Paraffin-embedded Sections)

Image 2. Paraformaldehyde-fixed, paraffin embedded mouse colon, Antigen retrieval by boiling in sodium citrate buffer (pH6) for 15min, Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes, Blocking buffer at 37°C for 20min, Antibody incubation with FOXA1 (5F7) Monoclonal Antibody at 1:50 overnight at 4°C, followed by a conjugated secondary and DAB staining.



Immunofluorescence (Cultured Cells)

Image 3. MCF-7 cells were stained with FOXA1 (5F7) Monoclonal Antibody at 1:200 dilution, incubated overnight at 4C, followed by secondary antibody incubation, DAPI staining of the nuclei and detection.