

Product datasheet

Anti-FOXA1 antibody - ChIP Grade ab5089

★★★★☆ 3 Abreviews 52 References 画像数 4

製品の概要

製品名	Anti-FOXA1 antibody - ChIP Grade
製品の詳細	Goat polyclonal to FOXA1 - ChIP Grade
由来種	Goat
アプリケーション	適用あり: IHC-P, ChIP, WB
種交差性	交差種: Mouse, Human 交差が予測される動物種: Rat, Cow, Pig, Xenopus laevis, Zebrafish
免疫原	Synthetic peptide corresponding to Human FOXA1 aa 462-472 (C terminal). Sequence: C-GVYSRPVLNTS Database link: P55317 (Peptide available as ab23074)

[Run BLAST with](#)

[Run BLAST with](#)

ポジティブ・コントロール

ウェスタン・ブロット用ポジティブコントロール
[Recombinant Human FOXA1 protein](#) >

特記事項

Our customers have provided mixed feedback about the Chip application. The data suggests some lots worked perfect but some completely failed. We will be happy to answer any question from potential users. Customers can contact scientific support for latest information about the lot specific data.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
バッファー	Preservative: 0.02% Sodium azide Constituents: Tris buffered saline, 0.5% BSA
精製度	Ammonium Sulphate Precipitation
特記事項 (精製)	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.

ポリモノ	ポリクローナル
アイソタイプ	IgG

アプリケーション

Our [Abpromise guarantee](#) covers the use of **ab5089** in the following tested applications.

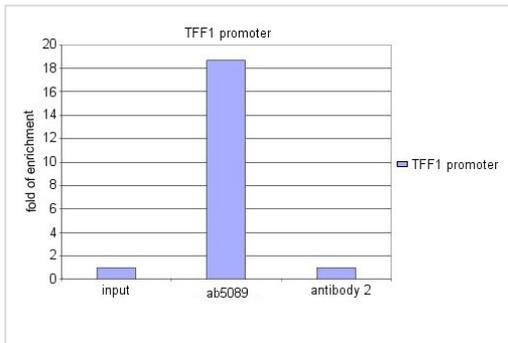
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション	Abreviews	特記事項
IHC-P		Use a concentration of 5 - 10 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. PubMed: 20018680
ChIP	★★★★★	Use at an assay dependent concentration.
WB	★★★★☆	Use a concentration of 0.3 - 1 µg/ml. Detects a band of approximately 50 kDa (predicted molecular weight: 49.1 kDa). Can be blocked with Human FOXA1 peptide (ab23074) . An additional band of unknown identity was also consistently observed at 37kDa. This band was successfully blocked by incubation with the immunizing peptide.

ターゲット情報

機能	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.
組織特異性	Highly expressed in prostate and ESR1-positive breast tumors. Overexpressed in esophageal and lung adenocarcinomas.
配列類似性	Contains 1 fork-head DNA-binding domain.
細胞内局在	Nucleus.

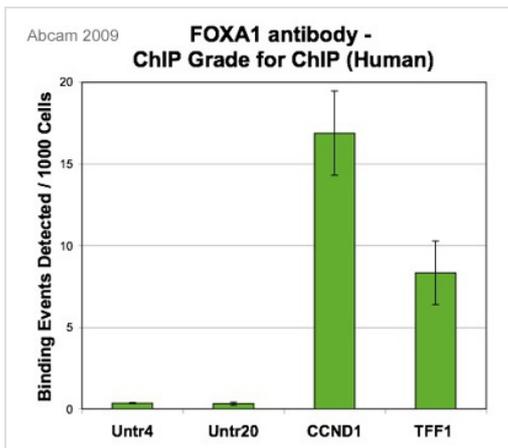
画像



ChIP - Anti-FOXA1 antibody - ChIP Grade (ab5089)

Goat polyclonal to FOXA1 antibody (ab5089) was used in a ChIP assay to detect *in vivo* binding of FOXA1/HNF3a to the promoter of the TFF1 gene in MCF-7 cells. The cells were fixed in 1% formaldehyde for 15 minutes at room temperature and ChIP was performed using 6µg/ml ab5089. Real-time PCR was used to quantify the enrichment of the TFF1 promoter in the FOXA1 ChIP'd DNA, using the input DNA as the reference. The results indicate that there is an 18-fold enrichment of the TFF1 promoter in the DNA ChIP'd with ab5089.

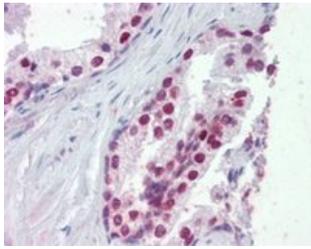
This image was submitted as part of a review



ChIP - Anti-FOXA1 antibody - ChIP Grade (ab5089)

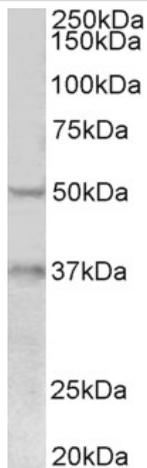
This image is a courtesy of Genpathway Inc

Chromatin was prepared from nuclear lysate of the human MCF7 breast epithelial adenocarcinoma cells. The cross-linking (X-ChIP) technique was used, crosslinking was performed for 15 minutes in formaldehyde. The primary antibody was diluted to 0.2 µg/µg chromatin and incubated with the sample for 16 hours at 4°C in a dilution buffer that contains SDS, DOC, Triton X-100, EDTA, HEPES, NaCl. The immunoprecipitated DNA was quantified by real time PCR. Ct values were converted to DNA copy numbers using a standard curve in the Q-PCR step. The number of binding events detected for each test reaction was then calculated by taking into account the DNA copy number, cell equivalents of chromatin used in the ChIP and PCR, and primer pair amplification efficiency.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXA1 antibody - ChIP Grade (ab5089)

ab5089 at 5 µg/ml staining FOXA1 in Human prostate tissue by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections). Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



Western blot - Anti-FOXA1 antibody - ChIP Grade (ab5089)

Anti-FOXA1 antibody - ChIP Grade (ab5089) at 0.3 µg/ml + HepG2 at 35 µg

Predicted band size: 49.1 kDa

Observed band size: 50 kDa

Additional bands at: 37 kDa. We are unsure as to the identity of these extra bands.

An additional band of unknown identity was also consistently observed at 37kDa.

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