# abcam

# Product datasheet

# Anti-FOXA1 antibody [1B1] ab55178



★★★★★ 1 Abreviews 13 References 画像数 5

### 製品の概要

製品名 Anti-FOXA1 antibody [1B1]

製品の詳細 Mouse monoclonal [1B1] to FOXA1

由来種 Mouse

アプリケーション 適用あり: WB, IHC-P, ICC/IF, Flow Cyt

種交差性 交差種: Human

免疫原 Recombinant fragment corresponding to Human FOXA1 aa 367-472.

Database link: P55317

ポジティブ・コントロール WB: HepG2 and HeLa cell lysates.

特記事項 This product was changed from ascites to tissue culture supernatant on 24/1/19. Please note that

the dilutions may need to be adjusted accordingly. If you have any questions, please do not

hesitate to contact our scientific support team.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

# 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

**バッファー** pH: 7.40

Constituent: PBS

精製度 Protein A purified

特記事項(精製) Purified from TCS.

**ポリ/モノ** モノクローナル

1

**ウローン名** 1B1 IgG2a **軽鎖の種類** kappa

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab55178の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		Use at an assay dependent concentration. Predicted molecular weight: 49 kDa.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval via the microwave method before commencing with IHC staining protocol.
ICC/IF	<b>★★★★☆ (1)</b>	Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. <u>ab170191</u> - Mouse monoclonal lgG2a, is suitable for use as an isotype control with this antibody.

## 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 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.

#### 組織特異性

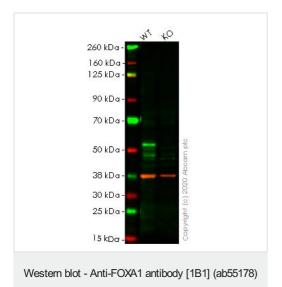
Highly expressed in prostate and ESR1-positive breast tumors. Overexpressed in esophageal and lung adenocarcinomas.

配列類似性

Contains 1 fork-head DNA-binding domain.

細胞内局在

Nucleus.



All lanes: Anti-FOXA1 antibody [1B1] (ab55178) at 1/500 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: FOXA1 knockout HeLa cell lysate

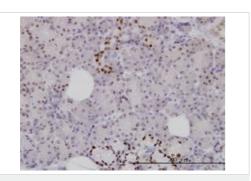
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 49 kDa **Observed band size:** 49 kDa

**Lanes 1-2:** Merged signal (red and green). Green - ab55178 observed at 49 kDa. Red - Anti-GAPDH antibody[EPR16891] - Loading Control (<u>ab181602</u>) observed at 37 kDa.

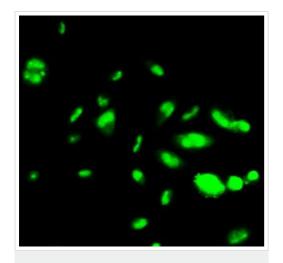
ab55178 was shown to react with FOXA1 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line ab261823 (knockout cell lysate ab256920) was used. Wild-type HeLa and FOXA1 knockout HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab55178 and Anti-GAPDH antibody[EPR16891] - Loading Control (ab181602) overnight at 4°C at a 1 in 500 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye®800CW) preadsorbed (ab216772) and Goat Anti-Rabbit IgG H&L (IRDye®680RD) preadsorbed (ab216777) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-FOXA1 antibody [1B1] (ab55178)

FOXA1 antibody (ab55178) used in immunohistochemistry at 3ug/ml on formalin fixed and paraffin embedded human salivary gland.

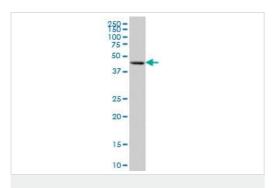
This image was generated using the ascites version of the product.



Immunocytochemistry/ Immunofluorescence - Anti-FOXA1 antibody [1B1] (ab55178)

ab55178 at 10 ug/ml staining FOXA1 in human HepG2 cells by Immunocytochemistry/ Immunofluorescence.

This image was generated using the ascites version of the product.



Western blot - Anti-FOXA1 antibody [1B1] (ab55178)

FOXA1 antibody (ab55178) at 1ug/lane + HepG2 cell lysate at 25ug/lane.

This image was generated using the ascites version of the product.

Flow Cytometry - Anti-FOXA1 antibody [1B1] (ab55178)

Overlay histogram showing HepG2 cells stained with ab55178 (red line). The cells were fixed with 4 % paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab55178, 1 $\mu$ g/1x10<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was DyLight®

488 goat anti-mouse lgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse lgG2a [ICIGG2A] (ab91361,  $1\mu g/1x10^6$  cells) used under the same conditions. Acquisition of >5,000 events was performed.

This image was generated using the ascites version of the product.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.co.jp/abpromise">https://www.abcam.co.jp/abpromise</a> or contact our technical team.

### Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors