

## Product datasheet

# Anti-FOXA1 antibody [2F83] ab40868

★★★★★ 1 Abreviews 9 References 3 图像

### 概述

产品名称	Anti-FOXA1抗体[2F83]
描述	小鼠单克隆抗体[2F83] to FOXA1
经测试应用	适用于: WB, IHC-P, Flow Cyt, IP
种属反应性	与反应: Mouse, Human
免疫原	Recombinant full length protein (Human)
阳性对照	<div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <a href="#">购买相配的WB阳性对照</a>  <b>Recombinant Human FOXA1 protein</b> &gt;         </div> Mouse fetal lung tissue.

### 性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	Preservative: 0.01% Sodium Azide
纯度	Tissue culture supernatant
克隆	单克隆
克隆编号	2F83
同种型	IgG1
轻链类型	kappa

### 应用

Our [Abpromise guarantee](#) covers the use of **ab40868** in the following tested applications.

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

应用	Ab评论	说明
WB	★★★★★	1/1000. Detects a band of approximately 46 kDa (predicted molecular weight: 49 kDa).
IHC-P		1/2000.

应用	Ab评论	说明
Flow Cyt		1/50 - 1/100. <a href="#">ab170190</a> -Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
IP		Use at an assay dependent concentration. PubMed: 23814048

## 靶标

### 功能

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.

### 组织特异性

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

### 序列相似性

Contains 1 fork-head DNA-binding domain.

### 细胞定位

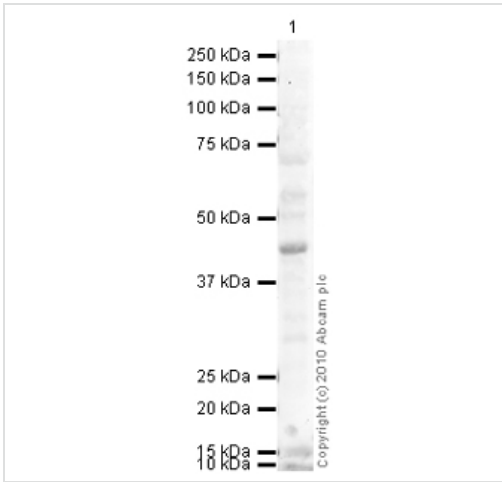
Nucleus.

## 图片



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FOXA1 antibody [2F83] (ab40868)

Ab40868 staining Mouse fetal lung tissue at 1:200 dilution by Immunohistochemistry paraffin embedded sections. FOXA1 was visualised by DAB (dark red colour) and counterstained with Nuclear Fast Red (pink colour). Magnification 20x.



Western blot - Anti-FOXA1 antibody [2F83] (ab40868)

Anti-FOXA1 antibody [2F83] (ab40868) + Prostate Tumor Lysate Tissue Lysate at 10 µg

**Secondary**

Goat Anti-Mouse IgG H&L (HRP) preadsorbed (ab97040) at 1/5000 dilution  
Developed using the ECL technique

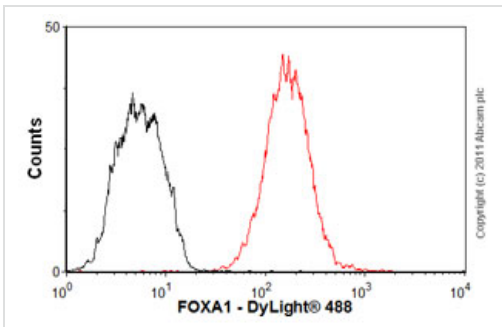
Performed under reducing conditions.

**Predicted band size :** 49 kDa

**Observed band size :** 46 kDa

**Additional bands at :** 29 kDa, 73 kDa. We are unsure as to the identity of these extra bands.

**Exposure time :** 8 minutes



Flow Cytometry - Anti-FOXA1 antibody [2F83] (ab40868)

Overlay histogram showing HepG2 cells stained with ab40868 (red line). The cells were fixed with 80% methanol (5 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 followed by the antibody (ab40868, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HepG2 cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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