


### Anti-FOXA2 antibody [EPR4465] - ChIP Grade ab108396

**重组** RabMAb

**4 References** **6 图像**

#### 概述

产品名称	Anti-FOXA2抗体[EPR4465] - ChIP Grade
描述	兔单克隆抗体[EPR4465] to FOXA2 - ChIP Grade
宿主	Rabbit
经测试应用	<b>适用于:</b> WB, ChIP, ICC/IF
种属反应性	<b>与反应:</b> Human <b>预测可用于:</b> Mouse, Rat 
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	HepG2 and Human colon cancer lysates.
常规说明	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

#### 性能

形式	Liquid
存放说明	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 59% PBS, 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR4465
同种型	IgG

## 应用

### The Abpromise guarantee

**Abpromise™** 承诺保证使用 ab108396 于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab 评论	说明
WB		1/1000. Detects a band of approximately 52 kDa (predicted molecular weight: 48 kDa).
ChIP		Use at an assay dependent concentration.
ICC/IF		1/300 - 1/600.

## 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). In embryonic development is required for notochord formation. Involved in the development of multiple endoderm-derived organ systems such as the liver, pancreas and lungs; FOXA1 and FOXA2 seem to have at least in part redundant roles. 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; regulates the expression of genes important for glucose sensing in pancreatic beta-cells and glucose homeostasis. Involved in regulation of fat metabolism. Binds to fibrinogen beta promoter and is involved in IL6-induced fibrinogen beta transcriptional activation.

### 序列相似性

Contains 1 fork-head DNA-binding domain.

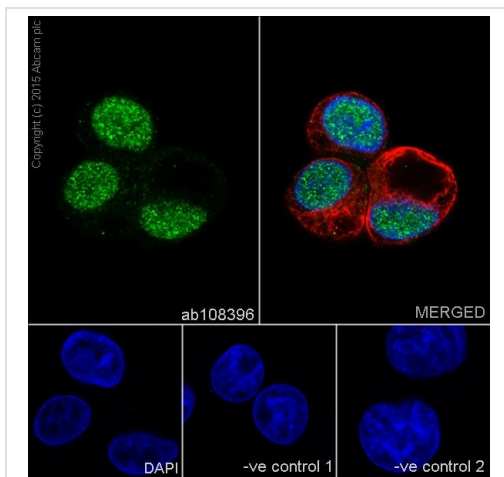
### 翻译后修饰

Phosphorylation on Thr-156 abolishes binding to target promoters and subsequent transcription activation upon insulin stimulation.

### 细胞定位

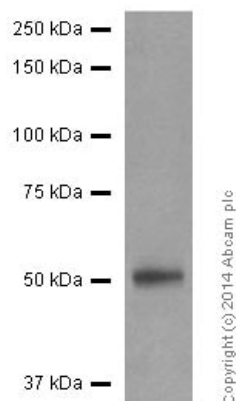
Nucleus. Cytoplasm. Shuttles between the nucleus and cytoplasm in a CRM1-dependent manner and in response to insulin signaling via AKT1 is exported from the nucleus.

## 图片



Immunocytochemistry/ Immunofluorescence - Anti-FOXA2 antibody [EPR4465] - ChIP Grade (ab108396)

Immunofluorescence staining of HepG2 cells with purified ab108396 at a working dilution of 1 in 300, counter-stained with DAPI. Tubulin was stained with mouse anti-tubulin at a dilution of 1/1000 (**ab7291**) and Alexa Fluor® 594 goat anti-mouse at a dilution of 1/500 (**ab150120**). The secondary antibody was **ab150077** Alexa Fluor® 488 goat anti rabbit, used at a dilution of 1 in 500. The cells were fixed in 4% PFA and permeabilized using 0.1% Triton X 100. The negative controls are shown in the bottom middle and right hand panels - for the first negative control, purified ab108396 was used at a dilution of 1/200 followed by an Alexa Fluor® 555 goat anti-mouse antibody at a dilution of 1/500 and for the second negative control mouse primary antibody (**ab7291**) and anti-rabbit secondary antibody (**ab15007**) were used.



Western blot - Anti-FOXA2 antibody [EPR4465] - ChIP Grade (ab108396)

Anti-FOXA2 antibody [EPR4465] - ChIP Grade (ab108396) at 1/1000 dilution (purified) + HepG2 cell lysate at 10 µg

### Secondary

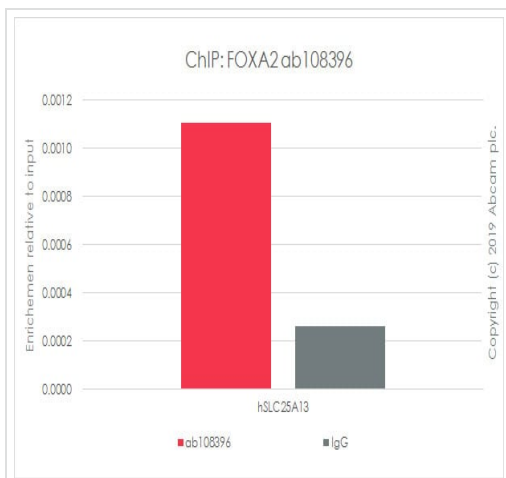
HRP goat anti-rabbit (H+L) at 1/1000 dilution

**Predicted band size:** 48 kDa

**Observed band size:** 52 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



ChIP - Anti-FOXA2 antibody [EPR4465] - ChIP Grade (ab108396)

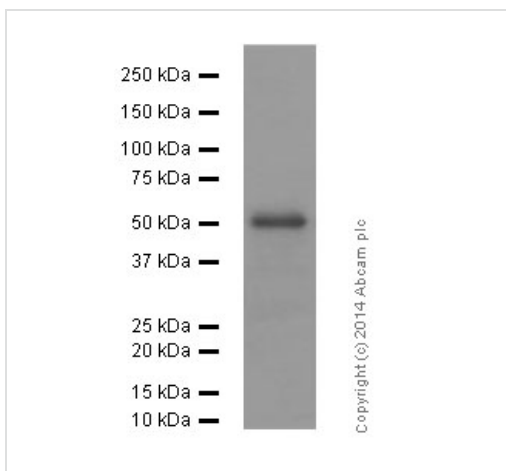
Chromatin was prepared from HepG2 cells according to the Abcam Dual X-ChIP protocol\*. Cells were fixed with EGS for 30 minutes, then formaldehyde for 10 minutes.

The ChIP was performed with 25 µg of chromatin, 5 µg of ab108396 (red), and 20 µl of Protein A/G sepharose beads. 5 µg of rabbit normal IgG was added to the beads control (gray). The immunoprecipitated DNA was quantified by real time PCR (Sybr green approach).

Primers and probes are located in the first kb of the transcribed region.

\*[http://www.abcam.com/resources?](http://www.abcam.com/resources?keywords=X%20ChIP%20protocol)

keywords=X%20ChIP%20protocol



Western blot - Anti-FOXA2 antibody [EPR4465] - ChIP Grade (ab108396)

Anti-FOXA2 antibody [EPR4465] - ChIP Grade (ab108396) at 1/5000 dilution (purified) + SW480 cell lysate at 20 µg

### Secondary

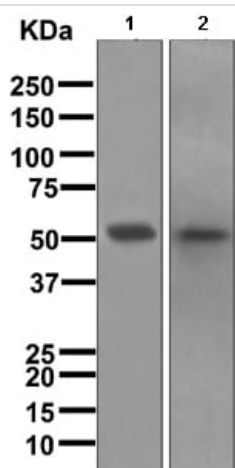
HRP goat anti-rabbit (H+L) at 1/1000 dilution

**Predicted band size:** 48 kDa

**Observed band size:** 52 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



Western blot - Anti-FOXA2 antibody [EPR4465] - ChIP Grade (ab108396)

**All lanes :** Anti-FOXA2 antibody [EPR4465] - ChIP Grade (ab108396) at 1/1000 dilution

**Lane 1 :** HepG2 lysate

**Lane 2 :** Human colon cancer lysate

Lysates/proteins at 10 µg per lane.

**Predicted band size:** 48 kDa

#### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-FOXA2 antibody [EPR4465] - ChIP Grade (ab108396)

**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 <https://www.abcam.cn/abpromise> or contact our technical team.

## **Terms and conditions**

---

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