

# Anti-Estrogen Receptor alpha (phospho S118) antibody [E91] ab32396

重组 RabMAb

★★★★☆ **2 Abreviews** **18 References** 10 图像

### 概述

产品名称	Anti-Estrogen Receptor alpha (phospho S118)抗体[E91]
描述	兔单克隆抗体[E91] to Estrogen Receptor alpha (phospho S118)
宿主	Rabbit
特异性	This antibody only detects ER alpha phosphorylated on Serine 118.
经测试应用	<b>适用于:</b> ChIC/CUT&RUN-seq, Dot blot, WB, ICC/IF <b>不适用于:</b> Flow Cyt or IHC-P
种属反应性	<b>与反应:</b> Human
免疫原	Synthetic peptide within Human Estrogen Receptor alpha. The exact sequence is proprietary.
阳性对照	MCF7 cell lysate human breast adenocarcinoma
常规说明	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <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> <p>For more information <a href="#">see here</a>.</p> <p>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>.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

### 性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

纯度	Protein A purified
克隆	单克隆
克隆编号	E91
同种型	IgG

## 应用

**The Abpromise guarantee** **Abpromise™** 承诺保证使用 ab32396 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。

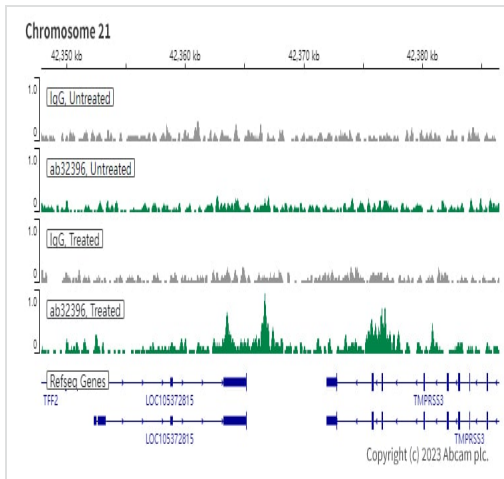
应用	Ab评论	说明
ChIC/CUT&RUN-seq		Use at an assay dependent concentration.
Dot blot		1/1000.
WB	★★★★☆ (2)	1/1000. Detects a band of approximately 66 kDa (predicted molecular weight: 66 kDa).
ICC/IF		1/200. <b>For unpurified use at 1/50 - 1/100 dilution.</b>

**应用说明** Is unsuitable for Flow Cyt or IHC-P.

## 靶标

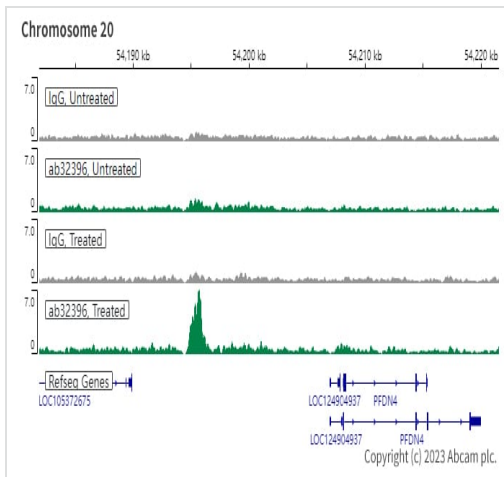
<b>功能</b>	Nuclear hormone receptor. The steroid hormones and their receptors are involved in the regulation of eukaryotic gene expression and affect cellular proliferation and differentiation in target tissues. Can activate the transcriptional activity of TFF1.
<b>序列相似性</b>	Belongs to the nuclear hormone receptor family. NR3 subfamily. Contains 1 nuclear receptor DNA-binding domain.
<b>结构域</b>	Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal ligand-binding domain.
<b>翻译后修饰</b>	Phosphorylated by cyclin A/CDK2. Phosphorylation probably enhances transcriptional activity. Glycosylated; contains N-acetylglucosamine, probably O-linked. Ubiquitinated. Deubiquitinated by OTUB1. Dimethylated by PRMT1 at Arg-260. The methylation may favor cytoplasmic localization. Palmitoylated (isoform 3). Not biotinylated (isoform 3).
<b>细胞定位</b>	Nucleus. Cytoplasm. Cell membrane. A minor fraction is associated with the inner membrane and Nucleus. Cytoplasm. Cell membrane. Associated with the inner membrane via palmitoylation.

## 图片



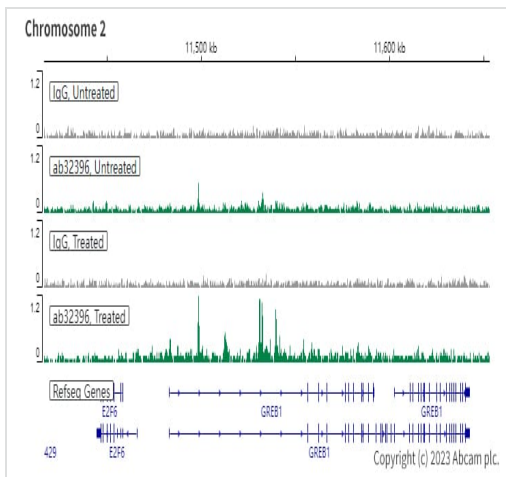
ChIC/CUT&RUN sequencing - Anti-Estrogen  
Receptor alpha (phospho S118) antibody [E91]  
(ab32396)

ChIC/CUT&RUN was performed using a pAG-MNase at a final concentration of 700 ng/μL, 2.5 x 10<sup>5</sup> MCF7 (Human breast adenocarcinoma epithelial cell) cells treated with phenol red free medium and 5% charcoal stripped FBS for 3 days than treated with β-estradiol (10 nM 45 min) and 5 μg of ab32396 [E91]. The resulting DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 10 million reads. The negative IgG control **ab172730** is also shown. The University of Geneva owns patents relevant to ChIC (Chromatin Immuno-Cleavage) methods.



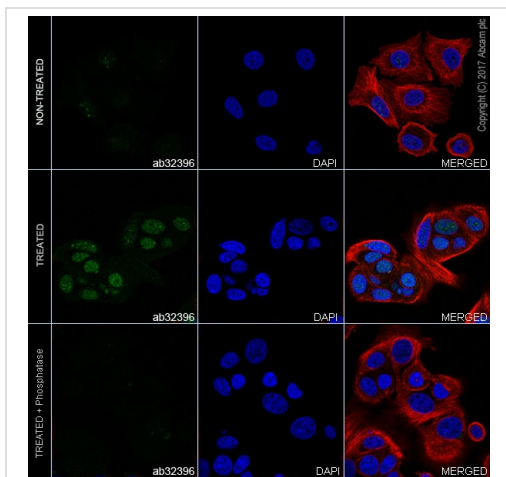
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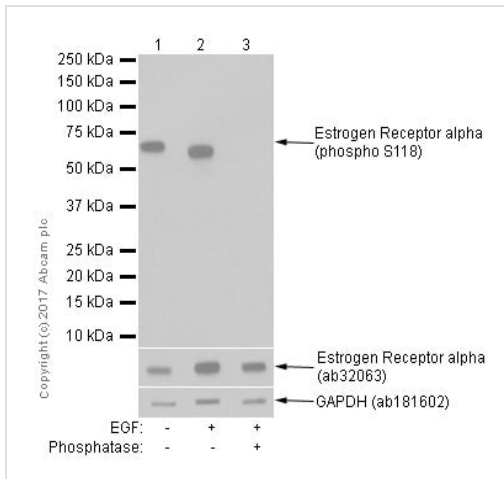
ChIC/CUT&RUN sequencing - Anti-Estrogen Receptor alpha (phospho S118) antibody [E91] (ab32396)

ChIC/CUT&RUN was performed using a pAG-MNase at a final concentration of 700 ng/ $\mu$ L,  $2.5 \times 10^5$  MCF7 (Human breast adenocarcinoma epithelial cell) cells treated with phenol red free medium and 5% charcoal stripped FBS for 3 days then treated with  $\beta$ -estradiol (10 nM 45 min) and 5  $\mu$ g of ab32396 [E91]. The resulting DNA was sequenced on the Illumina NovaSeq 6000 to a depth of 10 million reads. The negative IgG control **ab172730** is also shown. The University of Geneva owns patents relevant to ChIC (Chromatin Immuno-Cleavage) methods.



Immunocytochemistry/ Immunofluorescence - Anti-Estrogen Receptor alpha (phospho S118) antibody [E91] (ab32396)

Immunocytochemistry/ Immunofluorescence analysis of MCF7 (Human breast adenocarcinoma epithelial cell) treated with EGF (100ng/ml, 5min) and treated with Lambda Protein Phosphatase 311 for 2h cells labeling Estrogen receptor alpha (phospho S118) with purified ab32396 at 1:200 dilution (8.9 $\mu$ g/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) 1:200 (2.5  $\mu$ g/ml), **ab150077** Goat anti rabbit IgG(Alexa Fluor<sup>®</sup> 488) was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Western blot - Anti-Estrogen Receptor alpha (phospho S118) antibody [E91] (ab32396)

**All lanes :** Anti-Estrogen Receptor alpha (phospho S118) antibody [E91] (ab32396) at 1/1000 dilution (purified)

**Lane 1 :** MCF-7 (Human breast adenocarcinoma epithelial cell) whole cell lysate

**Lane 2 :** MCF-7 (Human breast adenocarcinoma epithelial cell) treated with epidermal growth factor. Whole cell lysates

**Lane 3 :** MCF-7 (Human breast adenocarcinoma epithelial cell) treated with epidermal growth factor. Whole cell lysates. Then the membrane was incubated with phosphatase.

Lysates/proteins at 15 µg per lane.

### Secondary

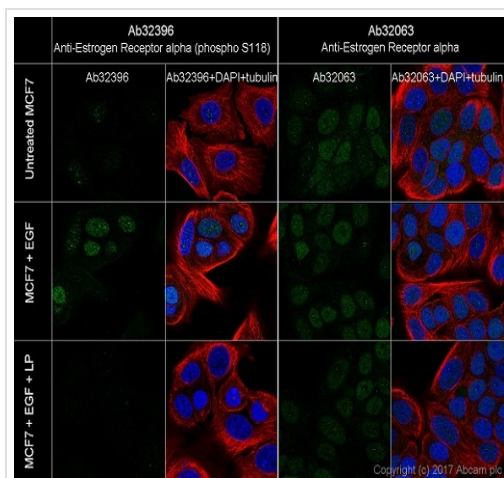
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

**Predicted band size:** 66 kDa

**Observed band size:** 60 kDa

**Exposure time:** 5 seconds

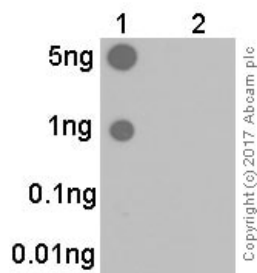
Blocking and diluting buffer and concentration: 5% NFDN/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-Estrogen Receptor alpha (phospho S118) antibody [E91] (ab32396)

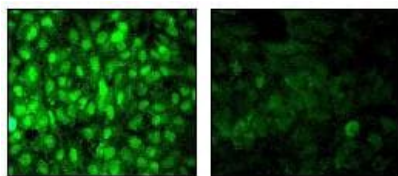
Immunocytochemistry/ Immunofluorescence analysis of MCF7 (Human breast adenocarcinoma cell line) cells labeling Estrogen Receptor alpha (phospho S118) with unpurified ab32396 at 5 µg/ml (1/200 dilution). Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. **ab150077**, an AlexaFluor®488 Goat anti-Rabbit was used as the secondary antibody at 2 µg/ml (1/1000 dilution). **ab195889**, Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) was used to counterstain at 2.5 µg/ml (1/200 dilution). DAPI nuclear counterstain.

Confocal image showing the signal increased after EGF (100ng/ml, 5 min) treatment and decreased after Lambda Protein Phosphatase treatment (31°C for 2 hours).



Dot Blot - Anti-Estrogen Receptor alpha (phospho S118) antibody [E91] (ab32396)

Dot blot analysis of Lane 1: Estrogen Receptor alpha (pS118) phospho peptide and Lane 2: Estrogen Receptor alpha non-phospho peptide labeling Estrogen Receptor alpha (phospho S118) with unpurified ab32396 at 1/1000 dilution. 5% NFDN/TBST was used as the diluting and blocking buffer. **ab97051**, Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated was used as the secondary antibody at 1/100000 dilution. Exposure time: 3 minutes.

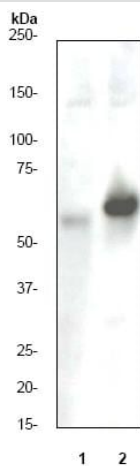


A

B

Immunofluorescent staining of (A) untreated and (B) Phosphatase-treated MCF-7 cells using unpurified ab32396.

Immunocytochemistry/ Immunofluorescence - Anti-Estrogen Receptor alpha (phospho S118) antibody [E91] (ab32396)



Western blot - Anti-Estrogen Receptor alpha (phospho S118) antibody [E91] (ab32396)

**All lanes :** Anti-Estrogen Receptor alpha (phospho S118) antibody [E91] (ab32396) at 1/1000 dilution (unpurified)

**Lane 1 :** MCF7 cell lysate (untreated).

**Lane 2 :** MCF7 cell lysate (treated with b-Estradiol and EGF).

**Predicted band size:** 66 kDa

**Observed band size:** 60 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-Estrogen Receptor alpha (phospho S118)  
antibody [E91] (ab32396)

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