abcam

Product datasheet

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

יובעדער RabMAb

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製品の概要

製品名 Anti-Estrogen Receptor alpha (phospho S118) antibody [E91]

製品の詳細 Rabbit monoclonal [E91] to Estrogen Receptor alpha (phospho S118)

由来種 Rabbit

特異性 This antibody only detects ER alpha phosphorylated on Serine 118.

アプリケーション 適用あり: ChIC/CUT&RUN-seq, Dot blot, WB, ICC/IF

適用なし: Flow Cyt or IHC-P

種交差性 交差種: Human

免疫原 Synthetic peptide within Human Estrogen Receptor alpha. The exact sequence is proprietary.

ポジティブ・コントロール MCF7 cell lysate human breast adenocarcinoma

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb patents**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

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 long

term. Avoid freeze / thaw cycle.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Protein A purified

ポリ/モノ モノクローナル

ウローン名 E91 **アイソタイプ** lgG

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ab32396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
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. For unpurified use at 1/50 - 1/100 dilution.

追加情報 Is unsuitable for Flow Cyt or IHC-P.

ターゲット情報

機能 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.

配列類似性 Belongs to the nuclear hormone receptor family. NR3 subfamily.

Contains 1 nuclear receptor DNA-binding domain.

ドメイン Composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-

terminal ligand-binding domain.

翻訳後修飾 Phosphorylated by cyclin A/CDK2. Phosphorylation probably enhances transcriptional activity.

Glycosylated; contains N-acetylglucosamine, probably O-linked.

Ubiquitinated. Deubiquitinated by OTUB1.

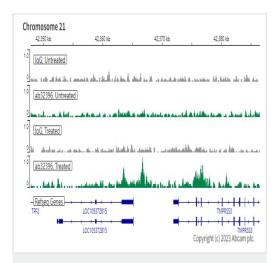
Dimethylated by PRMT1 at Arg-260. The methylation may favor cytoplasmic localization.

Palmitoylated (isoform 3). Not biotinylated (isoform 3).

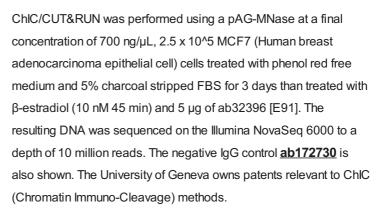
細胞内局在 Nucleus. Cytoplasm. Cell membrane. A minor fraction is associated with the inner membrane and

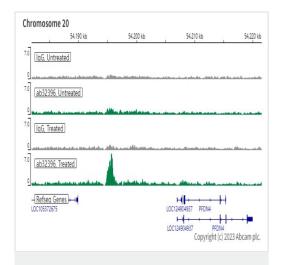
Nucleus. Cytoplasm. Cell membrane. Associated with the inner membrane via palmitoylation.

画像

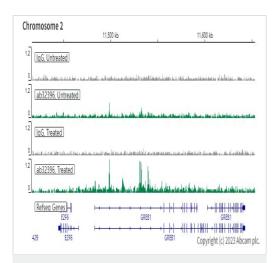


ChIC/CUT&RUN sequencing - Anti-Estrogen Receptor alpha (phospho S118) antibody [E91] (ab32396)



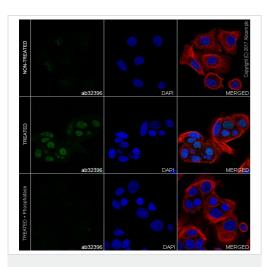


ChIC/CUT&RUN sequencing - Anti-Estrogen Receptor alpha (phospho S118) antibody [E91] (ab32396) ChIC/CUT&RUN was performed using a pAG-MNase at a final concentration of 700 ng/ μ L, 2.5 x 10^5 MCF7 (Human breast adenocarcinoma epithelial cell) cells treated with phenol red free medium and 5% charcoal stripped FBS for 3 days than treated with β -estradiol (10 nM 45 min) and 5 μ 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.



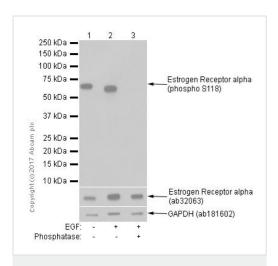
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Immunocytochemistry/ Immunofluorescence - Anti-Estrogen Receptor alpha (phospho S118) antibody [E91] (ab32396)

Immunocytochemistry/ Immunofluorescence analysis of MCF7 (Human breast adenocarcinoma epithelial cell) treated with EGF (100ng/ml, 5min) and treated with Lambda Protein Phosphatase 31 for 2h cells labeling Estrogen receptor alpha (phospho S118) with purified ab32396 at 1:200 dilution (8.9μg/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® 594) 1:200 (2.5 μg/ml). ab150077 Goat anti rabbit lgG(Alexa Fluor® 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

counterstain.

All lanes : Goat Anti-Rabbit lgG 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% NFDM/TBST.

Ab32396 Ab3239

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

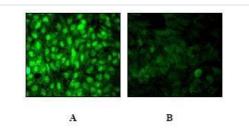
Immunocytochemistry/ Immunofluorescence analysis of MCF7 (Human breast adenocarcinoma cell line) cells labeling Estrogen Receptor alpha (phospho S118) with unpurified ab32396 at 5 μ g/ml (1/200 dilution). Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. **ab150077**,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

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).

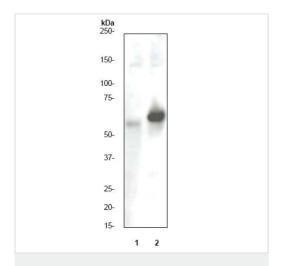


Dot Blot - Anti-Estrogen Receptor alpha (phospho S118) antibody [E91] (ab32396)

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% NFDM/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.



Immunocytochemistry/ Immunofluorescence - Anti-Estrogen Receptor alpha (phospho S118) antibody [E91] (ab32396) Immunofluorescent staining of (A) untreated and (B) Phosphatase-treated MCF-7 cells using unpurified ab32396.



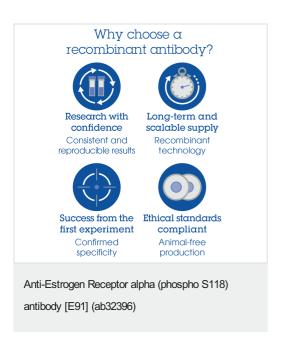
Western blot - Anti-Estrogen Receptor alpha (phospho S118) antibody [E91] (ab32396)

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



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