abcam

Product datasheet

# Anti-c-Fos antibody [EPR20769] ab214672

重组 RabMAb

★★★★★ 3 Abreviews 11 References 6 图像

## 概述

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|---|---|
| **产品名称** | Anti-c-Fos抗体[EPR20769] |
| **描述** | 兔单克隆抗体[EPR20769] to c-Fos |
| **宿主** | Rabbit |
| **经测试应用** | **适用于:** IP, ICC/IF, WB, IHC-P |
| **种属反应性** | **与反应:** Mouse, Human<br>**预测可用于:** Common marmoset |
| **免疫原** | **This product was produced with the following immunogens:**<br>Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.<br><br>Recombinant fragment within Human c-Fos aa 200-300. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please **contact** our Scientific Support team to discuss your requirements.<br>Database link: **P01100**<br>Run BLAST with Run BLAST with |
| **阳性对照** | WB: RAW264.7, Jurkat (PMA treated) and HeLa (20% FBS 2 hours) whole cell lysates. ICC/IF: HeLa cells. |
| **常规说明** | This product is a recombinant monoclonal antibody, which offers several advantages including:<br>- High batch-to-batch consistency and reproducibility<br>- Improved sensitivity and specificity<br>- Long-term security of supply<br>- Animal-free production<br>For more information **see here**.<br>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**. |

## 性能

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| **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. |

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| **存储溶液** | pH: 7.2<br>Preservative: 0.01% Sodium azide<br>Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA |
| **纯度** | Protein A purified |
| **克隆** | 单克隆 |
| **克隆编号** | EPR20769 |
| **同种型** | IgG |

## 应用

**The Abpromise guarantee** **Abpromise™承诺保证使用ab214672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 |
|---|---|---|
| **IP** | | 1/40. |
| **ICC/IF** | | 1/500. |
| **WB** | | 1/1000. Detects a band of approximately 55-60 kDa (predicted molecular weight: 40 kDa). |
| **IHC-P** | ★★★★★ (3) | Use at an assay dependent concentration. |

## 靶标

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| **功能** | Nuclear phosphoprotein which forms a tight but non-covalently linked complex with the JUN/AP-1 transcription factor. In the heterodimer, FOS and JUN/AP-1 basic regions each seems to interact with symmetrical DNA half sites. On TGF-beta activation, forms a multimeric SMAD3/SMAD4/JUN/FOS complex at the AP1/SMAD-binding site to regulate TGF-beta-mediated signaling. Has a critical function in regulating the development of cells destined to form and maintain the skeleton. It is thought to have an important role in signal transduction, cell proliferation and differentiation. |
| **序列相似性** | Belongs to the bZIP family. Fos subfamily.<br>Contains 1 bZIP domain. |
| **翻译后修饰** | Phosphorylated in the C-terminal upon stimulation by nerve growth factor (NGF) and epidermal growth factor (EGF). Phosphorylated, in vitro, by MAPK and RSK1. Phosphorylation on both Ser-362 and Ser-374 by MAPK1/2 and RSK1/2 leads to protein stabilization with phosphorylation on Ser-374 being the major site for protein stabilization on NGF stimulation. Phosphorylation on Ser-362 and Ser-374 primes further phosphorylations on Thr-325 and Thr-331 through promoting docking of MAPK to the DEF domain. Phosphorylation on Thr-232, induced by HA-RAS, activates the transcriptional activity and antagonizes sumoylation. Phosphorylation on Ser-362 by RSK2 in osteoblasts contributes to osteoblast transformation.<br>Constitutively sumoylated by SUMO1, SUMO2 and SUMO3. Desumoylated by SENP2. Sumoylation requires heterodimerization with JUN and is enhanced by mitogen stimulation. Sumoylation inhibits the AP-1 transcriptional activity and is, itself, inhibited by Ras-activated phosphorylation on Thr-232. |

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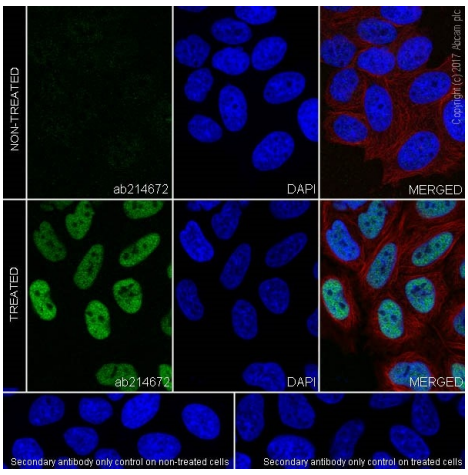
| **细胞定位** | Nucleus. |

## 图片

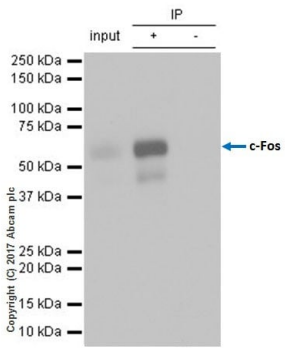



Immunocytochemistry/ Immunofluorescence - Anti-c-Fos antibody [EPR20769] (ab214672)

Immunofluorescent analysis of 4% paraformaldehyde-fixed. 0.1% Triton X-100 permeabilized serum treated and non-treated HeLa (human cervix adenocarcinoma epithelial cell) cells labeling c-Fos with ab214672 at 1/500 dilution followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing weakly nuclear staining on HeLa cells grown in serum free medium for 36 hours. Expression of c-Fos increased in HeLa cells grown in serum free medium for 36 hours followed by addition of 20% FBS for 2 hours.

The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) (red) at 1/200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution.




Immunoprecipitation - Anti-c-Fos antibody [EPR20769] (ab214672)

c-Fos was immunoprecipitated from 0.35 mg of HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate with ab214672 at 1/40 dilution. Western blot was performed from the immunoprecipitate using ab214672 at 1/500 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10,000 dilution

Lane 1: HeLa (human epithelial cell line from cervix adenocarcinoma) grown in serum free medium for 36 hours, followed by addition of 20%FBS for 2 hours, whole cell lysate, 10 µg (Input).

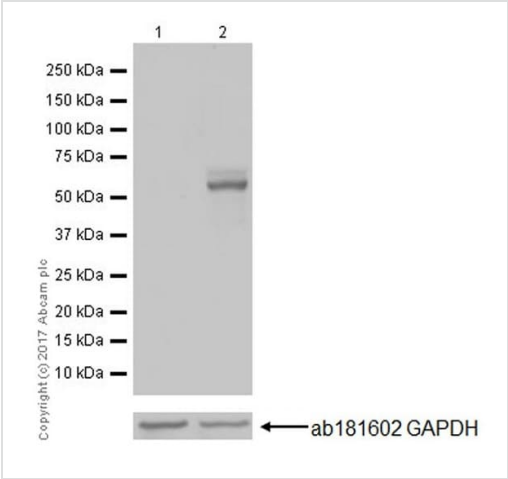
Lane 2: ab214672 IP in HeLa grown in serum free medium for 36 hours, followed by addition of 20% FBS for 2 hours, whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab214672 in HeLa grown in serum free medium for 36 hours, followed by addition of 20% FBS for 2 hours, whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 1 second.

The observed lower band is a proteasomal degradation fragment (PMID: 9737957).




Western blot - Anti-c-Fos antibody [EPR20769] (ab214672)

**All lanes :** Anti-c-Fos antibody [EPR20769] (ab214672) at 1/1000 dilution

**Lane 1 :** Untreated HeLa (human epithelial cell line from cervix adenocarcinoma) grown in serum free medium for 36 hours, whole cell lysate
**Lane 2 :** HeLa (human epithelial cell line from cervix adenocarcinoma) grown in serum free medium for 36 hours, followed by addition of 20% FBS for 2 hours, whole cell lysate

Lysates/proteins at 10 µg per lane.

**Secondary**
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000 dilution

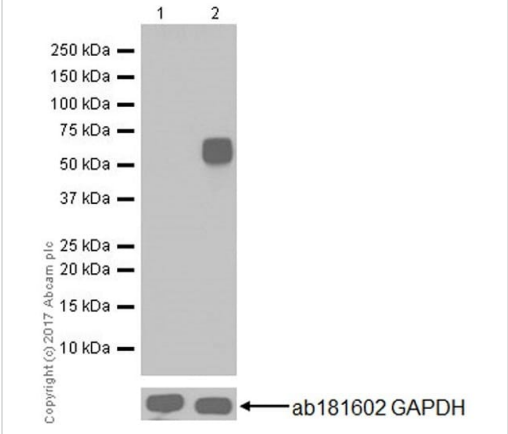
Developed using the ECL technique.

**Predicted band size:** 40 kDa
**Observed band size:** 55-60 kDa

Exposure time: 15 seconds.

Blocking/Dilution buffer: 5% NFDM/TBST.

The expression of c-Fos is induced by the addition of 20%FBS (PMID: 24386331, PMID: 23300800, PMID: 25695333).




Western blot - Anti-c-Fos antibody [EPR20769] (ab214672)

**All lanes :** Anti-c-Fos antibody [EPR20769] (ab214672) at 1/5000 dilution

**Lane 1 :** Untreated Jurkat (human T cell leukemia cell line from peripheral blood) grown in serum free medium overnight, whole cell lysate
**Lane 2 :** Jurkat (human T cell leukemia cell line from peripheral blood) grown in serum free medium overnight, followed by treatment with 200 nM PMA for 4 hours, whole cell lysate

Lysates/proteins at 10 µg per lane.

**Secondary**
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at

1/100000 dilution

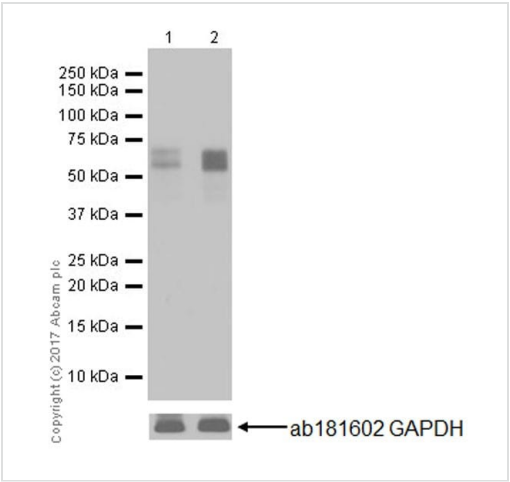
Developed using the ECL technique.

**Predicted band size:** 40 kDa
**Observed band size:** 55-60 kDa

Exposure time: 3 minutes.

Blocking/Dilution buffer: 5% NFDM/TBST.

PMA treatment induces expression of c-Fos, as documented in the literature (PMID: 24386331, PMID: 23300800, PMID: 25695333).




Western blot - Anti-c-Fos antibody [EPR20769] (ab214672)

**All lanes :** Anti-c-Fos antibody [EPR20769] (ab214672) at 1/5000 dilution

**Lane 1 :** Untreated RAW264.7 (mouse macrophage cell line transformed with Abelson murine leukemia virus grown in serum free medium overnight, whole cell lysate
**Lane 2 :** RAW264.7 (mouse macrophage cell line transformed with Abelson murine leukemia virus) grown in serum free medium overnight, followed by treatment with 200 nM PMA for 4 hours, whole cell lysate

Lysates/proteins at 10 µg per lane.

**Secondary**
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

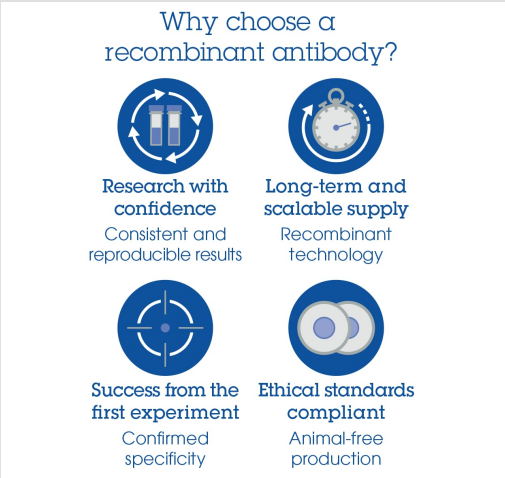
Developed using the ECL technique.

**Predicted band size:** 40 kDa
**Observed band size:** 55-60 kDa

Exposure time: 1 minute.

Blocking/Dilution buffer: 5% NFDM/TBST.

PMA treatment induces expression of c-Fos, as documented in the literature (PMID: 24386331, PMID: 23300800, PMID: 25695333).




Anti-c-Fos antibody [EPR20769] (ab214672)

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