

## Product datasheet

# Anti-TAK1 antibody [EPR5984] ab109526

敲除验证
重组
RabMAb

★★★★☆
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### 概述

<b>产品名称</b>	Anti-TAK1抗体[EPR5984]
<b>描述</b>	兔单克隆抗体[EPR5984] to TAK1
<b>宿主</b>	Rabbit
<b>经测试应用</b>	<b>适用于:</b> WB, IHC-P, ICC/IF, Flow Cyt <b>不适用于:</b> IP
<b>种属反应性</b>	<b>与反应:</b> Mouse, Rat, Human
<b>免疫原</b>	Synthetic peptide. within Human TAK1 aa 550 to the C-terminus (C terminal). The exact sequence is proprietary. Database link: <a href="#">O43318</a>
<b>阳性对照</b>	WB: K562, HeLa and A431 cell lysates. IHC-P: Human brain tissue. ICC/IF: Wild-type HAP1 cells.
<b>常规说明</b>	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>  This product is a recombinant rabbit monoclonal antibody.

### 性能

<b>形式</b>	Liquid
<b>存放说明</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C.
<b>存储溶液</b>	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol, 9.85% Tris glycine, 50% Tissue culture supernatant
<b>纯度</b>	Tissue culture supernatant
<b>克隆</b>	单克隆
<b>克隆编号</b>	EPR5984
<b>同种型</b>	IgG

### 应用

Our [Abpromise guarantee](#) covers the use of **ab109526** 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 - 1/10000. Detects a band of approximately 75 kDa (predicted molecular weight: 67 kDa).
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval via the microwave method before commencing with IHC staining protocol. (Heat to 98°C, allow to cool for 10-20 minutes)
ICC/IF		1/1000.
Flow Cyt		Use at an assay dependent concentration. <a href="#">ab172730</a> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

**应用说明** Is unsuitable for IP.

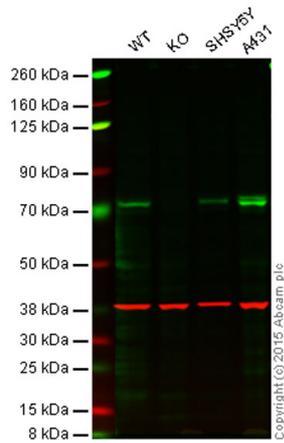
## 靶标

**功能** Component of a protein kinase signal transduction cascade. Mediator of TRAF6 and TGF-beta signal transduction. Activates IKBKB and MAPK8 in response to TRAF6 signaling. Stimulates NF-kappa-B activation and the p38 MAPK pathway. In osmotic stress signaling, plays a major role in the activation of MAPK8/JNK, but not that of NF-kappa-B.

**序列相似性** Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase subfamily.  
Contains 1 protein kinase domain.

**翻译后修饰** Association with TAB1/MAP3K7IP1 promotes autophosphorylation and subsequent activation. Association with TAB2/MAP3K7IP2, itself associated with free unanchored Lys-63 polyubiquitin chain, promotes autophosphorylation and subsequent activation of MAP3K7. Dephosphorylation at Thr-187 by PP2A and PPP6C leads to inactivation.  
Ubiquitinated, leading to proteasomal degradation (By similarity). Requires 'Lys-63'-linked polyubiquitination for autophosphorylation and subsequent activation. 'Lys-63'-linked ubiquitination does not lead to proteasomal degradation. Deubiquitinated by CYLD, a protease that selectively cleaves 'Lys-63'-linked ubiquitin chains. Deubiquitinated by Y.enterocolitica YopP.

## 图片



Western blot - Anti-TAK1 antibody [EPR5984] (ab109526)

**Lane 1:** Wild-type HAP1 cell lysate (20 µg)

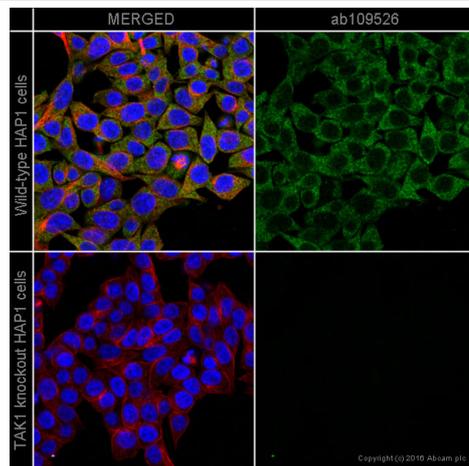
**Lane 2:** TAK1 knockout HAP1 cell lysate (20 µg)

**Lane 3:** SHS Y5Y cell lysate (20 µg)

**Lane 4:** A431 cell lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - ab109526 observed at 72 kDa. Red - loading control, ab8245, observed at 37 kDa.

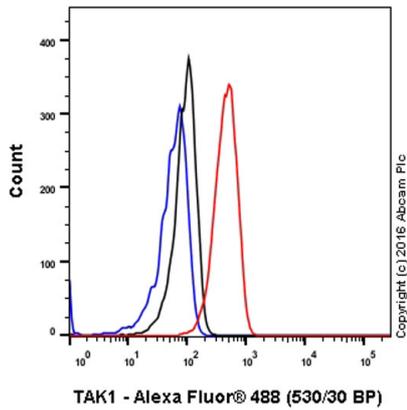
ab109526 was shown to specifically react with TAK1 when TAK1 knockout samples were used. Wild-type and TAK1 knockout samples were subjected to SDS-PAGE. ab109526 and ab8245 (loading control to GAPDH) were diluted 1/1000 and 1/2000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1/10 000 dilution for 1 h at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-TAK1 antibody [EPR5984] (ab109526)

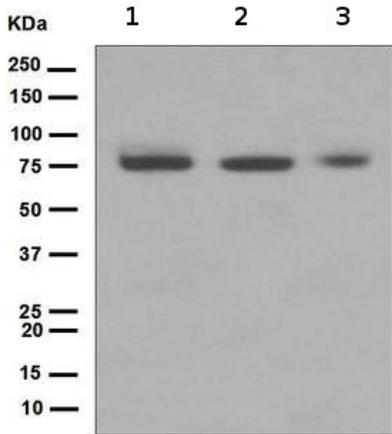
ab109526 staining TAK1 in wild-type HAP1 cells (top panel) and TAK1 knockout HAP1 cells (bottom panel). The cells were fixed with 4% formaldehyde (10min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab109526 at 1/1000 dilution and ab195889 at 1/250 dilution (shown in pseudo colour red) overnight at +4°C, followed by a further incubation at room temperature for 1h with a goat secondary antibody to Rabbit IgG (Alexa Fluor® 488) (ab150081) at 2 µg/ml (shown in green). Nuclear DNA was labelled in blue with DAPI.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Flow Cytometry - Anti-TAK1 antibody [EPR5984]  
(ab109526)

Flow Cytometry analysis of A431 (human epidermoid carcinoma) cells labeling TAK1 with unpurified ab109526 at 1/20 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488)(1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) was used as the unlabeled control.



Western blot - Anti-TAK1 antibody [EPR5984]  
(ab109526)

**All lanes** : Anti-TAK1 antibody [EPR5984] (ab109526) at 1/1000 dilution

**Lane 1** : K562 cell lysate

**Lane 2** : HeLa cell lysate

**Lane 3** : A431 cell lysate

Lysates/proteins at 10 µg per lane.

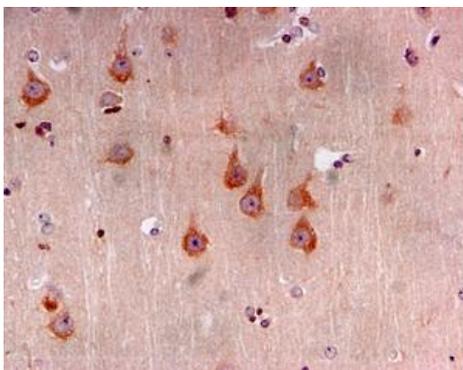
**Secondary**

**All lanes** : HRP labelled Goat anti-Rabbit IgG at 1/2000 dilution

**Predicted band size:** 67 kDa

**Observed band size:** 75 kDa

[why is the actual band size different from the predicted?](#)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TAK1 antibody [EPR5984] (ab109526)

ab109526, at a 1/50 dilution, staining TAK1 in Formalin/PFA-fixed paraffin-embedded Human brain tissue, by Immunohistochemistry.

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