

# Anti-TRIM21/SS-A antibody [EPR20290] - BSA and Azide free ab232549

敲除验证
重组
RabMAb

## 7 图像

### 概述

|              |  |
|--------------|--|
| <b>产品名称</b>  | Anti-TRIM21/SS-A抗体[EPR20290] - BSA and Azide free  |
| <b>描述</b>    | 兔单克隆抗体[EPR20290] to TRIM21/SS-A - BSA and Azide free   |
| <b>宿主</b>    | Rabbit   |
| <b>特异性</b>   | This reagent is not recommended for mouse or rat IHC-P and human ICC/IF.   |
| <b>经测试应用</b> | <b>适用于:</b> IHC-P, WB<br><b>不适用于:</b> ICC/IF or IP   |
| <b>种属反应性</b> | <b>与反应:</b> Mouse, Rat, Human  |
| <b>免疫原</b>   | Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.   |
| <b>阳性对照</b>  | WB: HeLa whole cell lysate untreated or treated with human IFN gamma; A549, HEK-293T and MOLT-4 whole cell lysates; human fetal spleen, fetal kidney and thymus lysates; rat spleen and thymus lysates; mouse thymus lysate. IHC-P: human tonsil tissue and wild-type A549 cell pellet.  |
| <b>常规说明</b>  | <p>ab232549 is the carrier-free version of <a href="#">ab207728</a>.</p> <p>Our <b>carrier-free</b> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p> <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> |

For more information [see here](#).

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb<sup>®</sup> patents](#).

## 性能

|      |   |
|------|---|
| 形式   | Liquid  |
| 存放说明 | Shipped at 4°C. Store at +4°C. Do Not Freeze. |
| 存储溶液 | pH: 7.2<br>Constituent: PBS                   |
| 无载体  | 是   |
| 纯度   | Protein A purified                            |
| 克隆   | 单克隆   |
| 克隆编号 | EPR20290                                      |
| 同种型  | IgG   |

## 应用

**The Abpromise guarantee**      **Abpromise™** 承诺保证使用 ab232549 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  |
|-------|------|---|
| IHC-P |      | Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. |
| WB    |      | Use at an assay dependent concentration. Detects a band of approximately 50 kDa (predicted molecular weight: 54 kDa).                                       |

应用说明      Is unsuitable for ICC/IF or IP.

## 靶标

**功能**      E3 ubiquitin-protein ligase whose activity is dependent on E2 enzymes, UBE2D1, UBE2D2, UBE2E1 and UBE2E2. Forms a ubiquitin ligase complex in cooperation with the E2 UBE2D2 that is used not only for the ubiquitination of USP4 and IKBKB but also for its self-ubiquitination. Component of cullin-RING-based SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complexes such as SCF(SKP2)-like complexes. A TRIM21-containing SCF(SKP2)-like complex is shown to mediate ubiquitination of CDKN1B ("Thr-187" phosphorylated-form), thereby promoting its degradation by the proteasome. Monoubiquitinates IKBKB that will negatively regulate Tax-induced NF-kappa-B signaling. Negatively regulates IFN-beta production post-pathogen recognition by polyubiquitin-mediated degradation of IRF3. Mediates the ubiquitin-mediated proteasomal degradation of IgG1 heavy chain, which is linked to the VCP-mediated ER-associated degradation (ERAD) pathway. Promotes IRF8 ubiquitination, which enhanced the ability of IRF8 to stimulate cytokine genes transcription in macrophages. Plays a role in the

regulation of the cell cycle progression. Enhances the decapping activity of DCP2. Exists as a ribonucleoprotein particle present in all mammalian cells studied and composed of a single polypeptide and one of four small RNA molecules. At least two isoforms are present in nucleated and red blood cells, and tissue specific differences in RO/SSA proteins have been identified. The common feature of these proteins is their ability to bind HY RNAs.2.

#### 组织特异性

Isoforms 1 and 2 are expressed in fetal and adult heart and fetal lung.

#### 通路

Protein modification; protein ubiquitination.

#### 序列相似性

Belongs to the TRIM/RBCC family.

Contains 1 B box-type zinc finger.

Contains 1 B30.2/SPRY domain.

Contains 1 RING-type zinc finger.

#### 结构域

The coiled-coil is necessary for the cytoplasmic localization. The B30.2/SPRY domain is necessary for the cytoplasmic localization, the interaction with IRF3 and for the IRF3-driven interferon beta promoter activity. The RING-type zinc finger is necessary for ubiquitination and for the IRF3-driven interferon beta promoter activity. Interacts with SKP2 and CUL1 in a RING finger-independent manner.

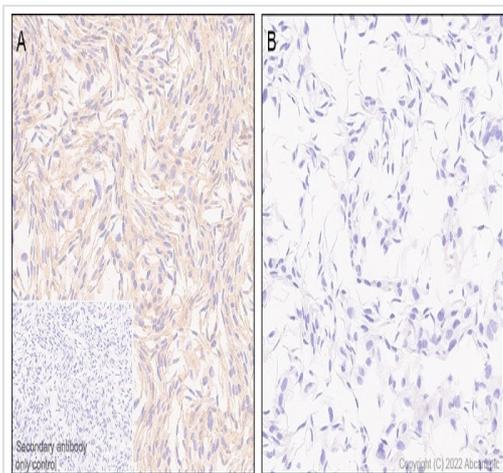
#### 翻译后修饰

Autoubiquitinated; does not lead to its proteasomal degradation. Deubiquitinated by USP4; leading to its stabilization.

#### 细胞定位

Cytoplasm. Nucleus. Cytoplasm > P-body. Enters the nucleus upon exposure to nitric oxide. Localizes to small dot- or rod-like structures in the cytoplasm, called cytoplasmic bodies (P-body) that are located underneath the plasma membrane and also diffusely in the cytoplasm and are highly motile in cells. Cytoplasmic bodies are located along the microtubules and do not share the same cytoplasmic bodies with TRIM5. Colocalizes with DCP2 in P-body.

#### 图片

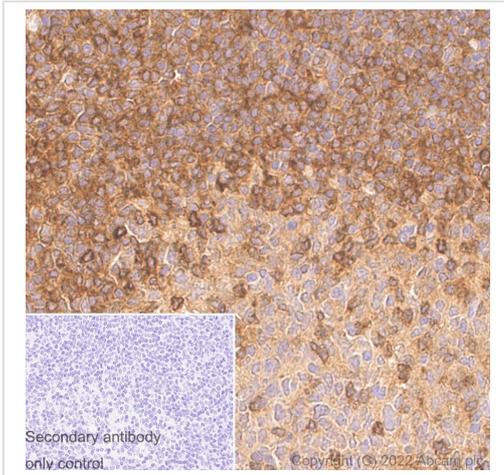


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TRIM21/SS-A antibody [EPR20290] - BSA and Azide free (ab232549)

Immunohistochemical analysis of paraffin-embedded A: Wild-type A549 (Human lung carcinoma epithelial cell) cell pellet, B: TRIM21 knockout A549 ([ab267080](#)) cell pellet labelling TRIM21/SS-A with [ab207728](#) at 1/500 dilution (1.212 µg/ml) followed by LeicaDS9800 (Bond™ Polymer Refine Detection) secondary antibody at a ready to use concentration. Positive staining on (A) wild-type A549 cell pellet, no staining on (B) TRIM21 knockout A549 ([ab267080](#)) cell pellet. The section was incubated with [ab207728](#) for 10 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.

This data was developed using [ab207728](#), the same antibody clone in a different buffer formulation.

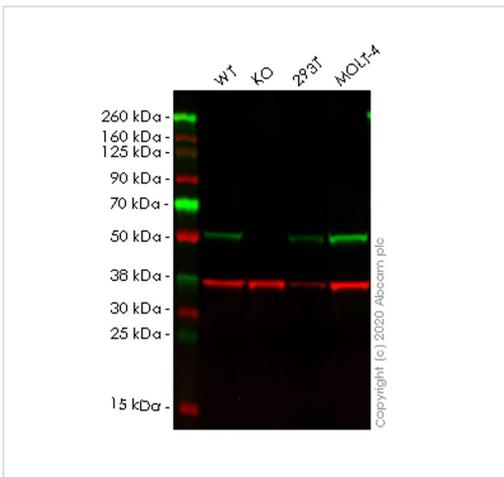


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TRIM21/SS-A antibody [EPR20290] - BSA and Azide free (ab232549)

Immunohistochemistry analysis of paraffin-embedded human tonsil tissue sections labelling TRIM21/SS-A with **ab207728** at 1/100 dilution. The section was incubated with **ab207728** for 10 mins at room temperature. Ready to use Leica DS9800 (Bond™ Polymer Refine Detection) was used as the secondary antibody. Sections were counterstained with Hematoxylin. Antigen retrieval was heat mediated with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 minutes.

Positive staining on human tonsil. The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

This data was developed using **ab207728**, the same antibody clone in a different buffer formulation.



Western blot - Anti-TRIM21/SS-A antibody [EPR20290] - BSA and Azide free (ab232549)

**All lanes** : Anti-TRIM21/SS-A antibody [EPR20290] (**ab207728**) at 1/1000 dilution

**Lane 1** : Wild-type A549 (Human lung carcinoma cell line) whole cell lysate

**Lane 2** : TRIM21 knockout A549 (Human lung carcinoma cell line) whole cell lysate

**Lane 3** : HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

**Lane 4** : MOLT-4 (Human lymphoblastic leukemia cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes** : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) at 1/10000 dilution

**Predicted band size:** 54 kDa

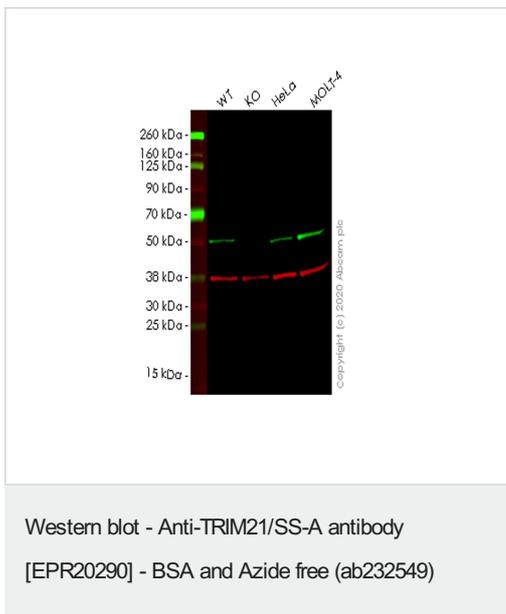
**Observed band size:** 50 kDa

This data was developed using **ab207728**, the same antibody clone in a different buffer formulation.

**Lanes 1-4:** Merged signal (red and green). Green - **ab207728**

observed at 50 kDa. Red - loading control [ab8245](#) observed at 36 kDa.

[ab207728](#) Anti-TRIM21/SS-A antibody [EPR20290] was shown to specifically react with TRIM21/SS-A in wild-type A549 cells. Loss of signal was observed when knockout cell line [ab267024](#) (knockout cell lysate [ab257766](#)) was used. Wild-type and TRIM21/SS-A knockout samples were subjected to SDS-PAGE. [ab207728](#) and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. 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 in 20000 dilution for 1 hour at room temperature before imaging.



**All lanes :** Anti-TRIM21/SS-A antibody [EPR20290] ([ab207728](#)) at 1/500 dilution

**Lane 1 :** Wild-type A549 cell lysate

**Lane 2 :** TRIM21 knockout A549 cell lysate

**Lane 3 :** HeLa cell lysate

**Lane 4 :** MOLT-4 cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes :** Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

**Predicted band size:** 54 kDa

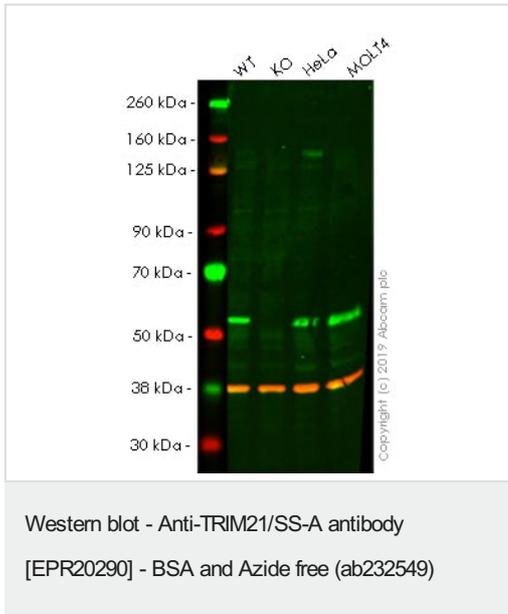
**Observed band size:** 50 kDa

This data was developed using [ab207728](#), the same antibody clone in a different buffer formulation.

**Lanes 1-4:** Merged signal (red and green). Green - [ab207728](#) observed at 50 kDa. Red - loading control [ab8245](#) observed at 36 kDa.

[ab207728](#) Anti-TRIM21/SS-A antibody [EPR20290] was shown to specifically react with TRIM21/SS-A in wild-type A549 cells. Loss of signal was observed when knockout cell line [ab267025](#) (knockout cell lysate [ab257767](#)) was used. Wild-type and TRIM21/SS-A

knockout samples were subjected to SDS-PAGE. **ab207728** and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 500 dilution and 1 in 20000 dilution respectively. 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 in 20000 dilution for 1 hour at room temperature before imaging.



**All lanes :** Anti-TRIM21/SS-A antibody [EPR20290] (**ab207728**) at 1/1000 dilution

**Lane 1 :** Wild-type HAP1 whole cell lysate

**Lane 2 :** TRIM21 knockout HAP1 whole cell lysate

**Lane 3 :** HeLa whole cell lysate

**Lane 4 :** MOLT-4 whole cell lysate

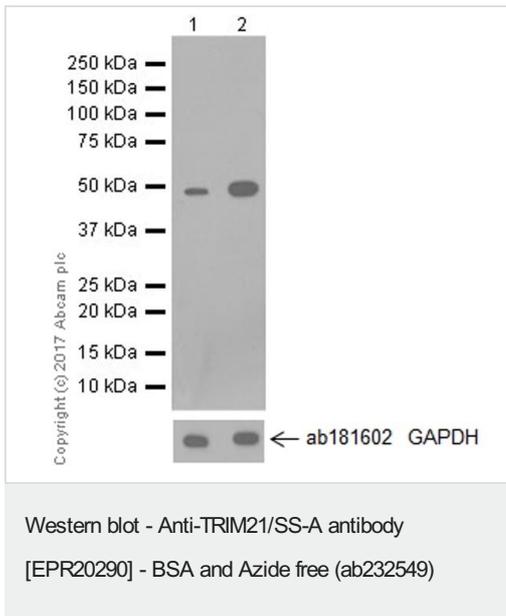
Lysates/proteins at 20 µg per lane.

**Predicted band size:** 54 kDa

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab207728**).

**Lanes 1 - 4:** Merged signal (red and green). Green - **ab207728** observed at 50 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

**ab207728** was shown to specifically react with in wild-type HAP1 cells as signal was lost in TRIM21 knockout cells. Wild-type and TRIM21 knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3% NF Milk. Ab207728 and **ab8245** (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



**All lanes** : Anti-TRIM21/SS-A antibody [EPR20290] ([ab207728](#)) at 1/1000 dilution

**Lane 1** : Untreated HeLa (human epithelial cell line from cervix adenocarcinoma), whole cell lysate

**Lane 2** : HeLa whole cell lysate treated with 10 ng/ml human interferon-a ([ab48750](#)) for 16 hours

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/10000 dilution

Developed using the ECL technique.

**Predicted band size:** 54 kDa

**Exposure time:** 3 minutes

Blocking/Dilution buffer: 5% NFDm/TBST.

The level of TRIM21 expression can be elevated by IFN alpha treatment (PMID: 18071879).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab207728](#)).

### 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-TRIM21/SS-A antibody [EPR20290] - BSA and Azide free (ab232549)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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