


### Anti-DDB1 antibody [EPR6089] ab109027

重组 RabMAb

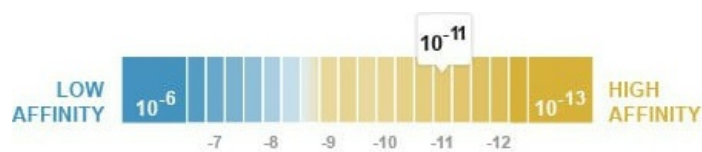
**21 References** 6 图像

#### 概述

<b>产品名称</b>	Anti-DDB1抗体[EPR6089]
<b>描述</b>	兔单克隆抗体[EPR6089] to DDB1
<b>宿主</b>	Rabbit
<b>经测试应用</b>	<b>适用于:</b> ICC/IF, WB, IHC-P <b>不适用于:</b> Flow Cyt
<b>种属反应性</b>	<b>与反应:</b> Mouse, Human <b>预测可用于:</b> Rat 
<b>免疫原</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>阳性对照</b>	HepG2, HeLa, NIH3T3, and Human platelet lysates, Human breast tissue. This antibody gave a positive result when used in the following formaldehyde fixed cell lines: UV-treated HeLa
<b>常规说明</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <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 <a href="#">see here</a> .  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> .

#### 性能

<b>形式</b>	Liquid
<b>存放说明</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>解离常数 (K<sub>D</sub>)</b>	K <sub>D</sub> = 8.40 x 10 <sup>-11</sup> M



[Learn more about K<sub>D</sub>](#)

<b>存储溶液</b>	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
<b>纯度</b>	Protein A purified
<b>克隆</b>	单克隆
<b>克隆编号</b>	EPR6089
<b>同种型</b>	IgG

## 应用

**The Abpromise guarantee** **Abpromise™** 承诺保证使用 ab109027 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
<b>ICC/IF</b>		1/100.
<b>WB</b>		1/50000 - 1/200000. Detects a band of approximately 130 kDa (predicted molecular weight: 127 kDa).
<b>IHC-P</b>		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

**应用说明** Is unsuitable for Flow Cyt.

## 靶标

**功能** Required for DNA repair. Binds to DDB2 to form the UV-damaged DNA-binding protein complex (the UV-DDB complex). The UV-DDB complex may recognize UV-induced DNA damage and recruit proteins of the nucleotide excision repair pathway (the NER pathway) to initiate DNA repair. The UV-DDB complex preferentially binds to cyclobutane pyrimidine dimers (CPD), 6-4 photoproducts (6-4 PP), apurinic sites and short mismatches. Also appears to function as a component of numerous distinct DCX (DDB1-CUL4-X-box) E3 ubiquitin-protein ligase complexes which mediate the ubiquitination and subsequent proteasomal degradation of target proteins. The functional specificity of the DCX E3 ubiquitin-protein ligase complex is determined by the variable substrate recognition component recruited by DDB1. DCX(DDB2) (also known as DDB1-CUL4-ROC1, CUL4-DDB-ROC1 and CUL4-DDB-RBX1) may ubiquitinate histone H2A, histone H3 and histone H4 at sites of UV-induced DNA damage. The ubiquitination of histones may facilitate their removal from the nucleosome and promote subsequent DNA repair. DCX(DDB2) also ubiquitinates XPC, which may enhance DNA-binding by XPC and promote NER. DCX(DTL) plays a role in PCNA-dependent polyubiquitination of CDT1 and MDM2-dependent ubiquitination of TP53 in response to radiation-induced DNA damage and during DNA replication. DCX(ERCC8) (the CSA complex) plays a role in transcription-coupled repair (TCR). May also play a role in ubiquitination of CDKN1B/p27kip when associated with CUL4 and SKP2.

**通路** Protein modification; protein ubiquitination.

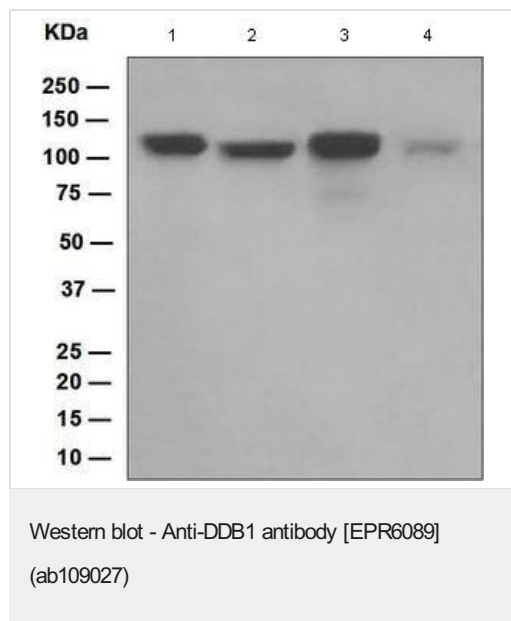
**序列相似性** Belongs to the DDB1 family.

**翻译后修饰** Ubiquitinated by CUL4A. Subsequently degraded by ubiquitin-dependent proteolysis.

细胞定位

Cytoplasm. Nucleus. Primarily cytoplasmic. Translocates to the nucleus following UV irradiation and subsequently accumulates at sites of DNA damage.

图片



All lanes : Anti-DDB1 antibody [EPR6089] (ab109027) at 1/50000 dilution

Lane 1 : HepG2 cell lysate

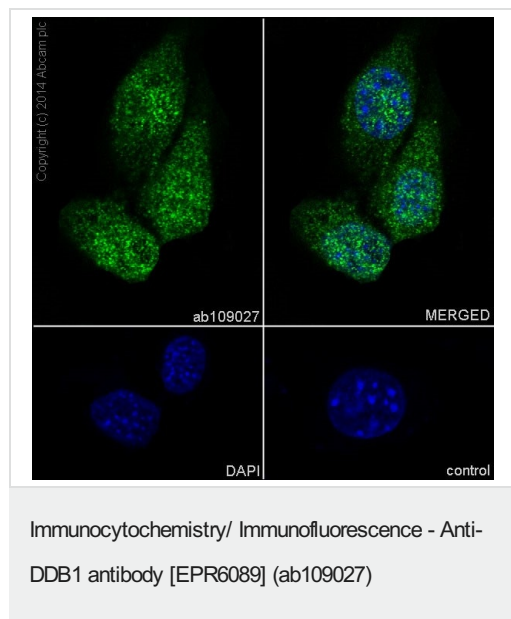
Lane 2 : HeLa cell lysate

Lane 3 : NIH3T3 cell lysate

Lane 4 : Human platelet lysate

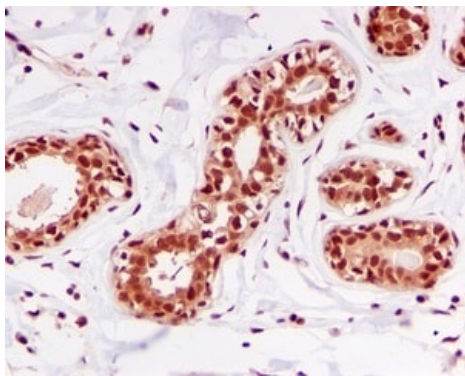
Lysates/proteins at 10 µg per lane.

Predicted band size: 127 kDa



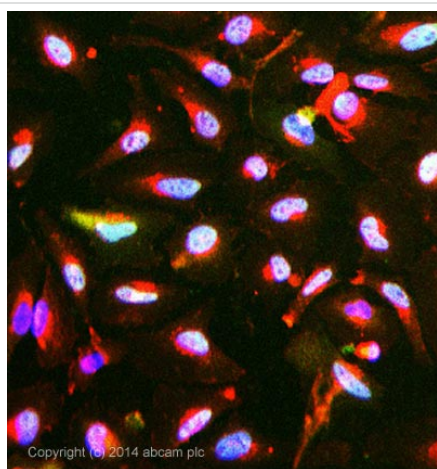
Immunocytochemistry analysis of NIH/3T3 (mouse embryonic fibroblast) cells labeling DDB1 with ab109027 at 1/250 (8.9 µg/mL). Cells were fixed with 4% Paraformaldehyde and permeabilised with 0.1% tritonX-100. **ab150077** AlexaFluor®488 Goat anti-Rabbit at 1/1000 (2 µg/mL) was used as the secondary antibody. DAPI (blue) was used as nuclear counterstain.

Confocal image showing nuclear and cytoplasmic staining in NIH/3T3 cells.



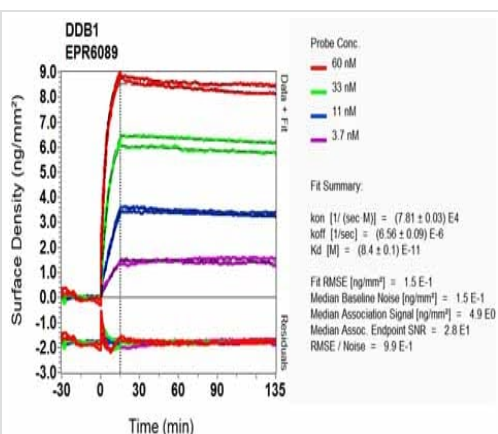
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DDB1 antibody [EPR6089] (ab109027)

Immunohistochemical analysis of paraffin-embedded Human breast tissue using ab109027 at a dilution of 1/100. Antigen retrieval was heat mediated before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-DDB1 antibody [EPR6089] (ab109027)

ab109027 stained UV-treated HeLa cells. The cells were 4% formaldehyde fixed for 10 minutes at room temperature and then incubated in 1% BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1 hour at room temperature to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab109027 at 1/100 dilution) overnight at +4°C. The secondary antibody (pseudo-colored green) was **ab150081** used at a 1/1000 dilution for 1 hour at room temperature. Alexa Fluor® 594 WGA was used to label plasma membranes (pseudo-colored red) at a 1/200 dilution for 1 hour at room temperature. DAPI was used to stain the cell nuclei (pseudo-colored blue) at a concentration of 1.43µM for 1 hour at room temperature.







SPR Scanning - Anti-DDB1 antibody [EPR6089] (ab109027)

Equilibrium dissociation constant ( $K_D$ )

Learn more about  $K_D$

[Click here to learn more about  \$K\_D\$](#)

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-DDB1 antibody [EPR6089] (ab109027)

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

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