abcam

Product datasheet

Anti-USP10 antibody [EPR4261] ab109219





重组 RabMAb

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概述

产品名称 Anti-USP10抗体[EPR4261]

描述 兔单克隆抗体[EPR4261] to USP10

宿主 Rabbit

经测试应用 适用于: WB, IP, IHC-P, ICC/IF

不适用于: Flow Cyt

种属反应性 与反应: Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: HeLa, 293T, A375 and A549 cell lysates. IHC-P: Human colon tissue. ICC: MCF-7 IP: HeLa.

常规说明 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.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

存储溶液

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue

culture supernatant

纯度 Tissue culture supernatant

克隆 单克隆

克隆编号 EPR4261

同种型 IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab109219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
WB	****(1)	1/1000 - 1/10000. Detects a band of approximately 110 kDa (predicted molecular weight: 87 kDa).
IP		1/10 - 1/100.
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Antigen retrieval is recommended.
ICC/IF		1/250 - 1/500.

应用说明 Is unsuitable for Flow Cyt.

靶标

功能 Hydrolase that can remove conjugated ubiquitin from target proteins such as p53/TP53, SNX3

and CFTR. Acts as an essential regulator of p53/TP53 stability: in unstressed cells, specifically deubiquitinates p53/TP53 in the cytoplasm, leading to counteract MDM2 action and stabilize p53/TP53. Following DNA damage, translocates to the nucleus and deubiquitinates p53/TP53, leading to regulate the p53/TP53-dependent DNA damage response. Does not deubiquitinate

MDM2. Deubiquitinates CFTR in early endosomes, enhancing its endocytic recycling.

组织特异性 Widely expressed.

序列相似性 Belongs to the peptidase C19 family. USP10 subfamily.

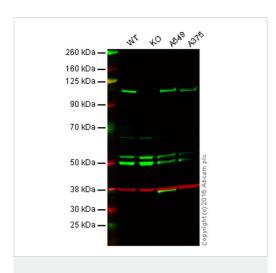
翻译后修饰 Phosphorylated by ATM following DNA damage, leading to stablization and translocation it to the

nucleus.

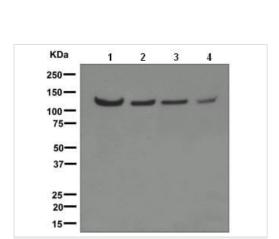
细胞定位 Cytoplasm. Nucleus. Early endosome. Cytoplasmic in normal conditions. After DNA damage,

translocates to the nucleus following phosphorylation by ATM.

图片



Western blot - Anti-USP10 antibody [EPR4261] (ab109219)



Western blot - Anti-USP10 antibody [EPR4261] (ab109219)

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

Lane 2: USP10 knockout HAP1 cell lysate (20 µg)

Lane 3: A549 cell lysate (20 µg)

Lane 4: A375 cell lysate (20 µg)

Lanes 1 to 4: Merged signal (red and green). Green - ab109219 observed at 115 kDa. Red - loading control, <u>ab8245</u>, observed at 37 kDa.

ab109219 was shown to recognize USP10 when USP10 knockout samples were used, along with additional cross-reactive bands. Wild-type and USP10 knockout samples were subjected to SDS-PAGE. ab109219 and <u>ab8245</u> (loading control to GAPDH) were both diluted at 1/1000 and 1/10000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1/10000 dilution for 1 h at room temperature before imaging.

All lanes : Anti-USP10 antibody [EPR4261] (ab109219) at 1/1000 dilution

Lane 1: Hela cell lysate

Lane 2: 293T cell lysate

Lane 3: A375 cell lysate

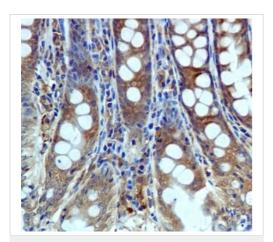
Lane 4: A549 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

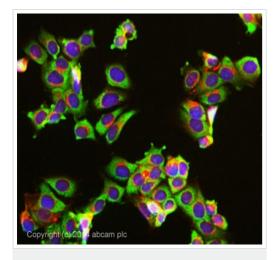
Predicted band size: 87 kDa **Observed band size:** 110 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-USP10 antibody
[EPR4261] (ab109219)

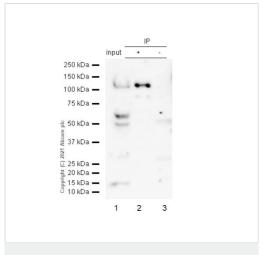
ab109219, at a 1/250 dilution, staining USP10 in paraffin embedded Human colon tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-USP10 antibody [EPR4261] (ab109219)

ICC/IF image of ab109219 stained MCF-7 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab109219 at 1/50 dilution overnight at +4°C. The secondary antibody (pseudo-colored green) was Alexa Fluor® 488 goat antirabbit (ab150081) lgG (H+L) preadsorbed, used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (pseudo-colored red) at a 1/200 dilution for 1h at room temperature. DAPI was used to stain the cell nuclei (pseudo-colored blue) at a concentration of 1.43 μ M for 1hour at room temperature.



Immunoprecipitation - Anti-USP10 antibody [EPR4261] (ab109219)

USP10 was immunoprecipitated from 0.35 mg HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10 μ g with 109219 at 1/30 dilution (2 μ g) . VeriBlot for IP Detection Reagent (HRP) (ab131366) was used at 1/5000 dilution.

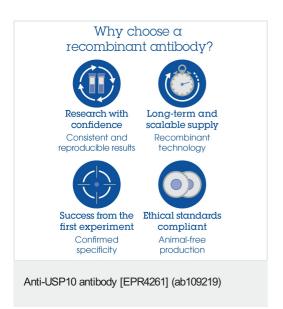
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10 μg

Lane 2: ab109219 IP in HeLa whole cell lysate

Lane 3: Rabbit monoclonal $\lg G$ ($\underline{ab172730}$) instead of ab109219 in HeLa whole cell lysate

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

Fresh lysate should be used to minimize protein degradation.



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