

Product datasheet

Anti-USP28 antibody [EPR4249(2)] ab126604

KO VALIDATED Recombinant RabMAb

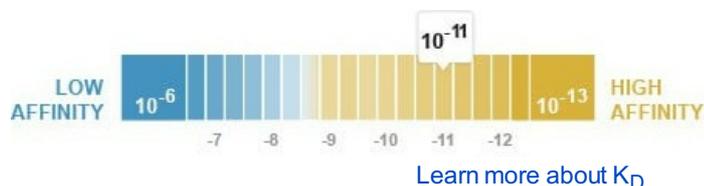
[3 References](#) [6 Images](#)

Overview

Product name	Anti-USP28 antibody [EPR4249(2)]
Description	Rabbit monoclonal [EPR4249(2)] to USP28
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, ICC/IF Unsuitable for: IHC-P or IP
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide, corresponding to residues in Human USP28.
Positive control	293T, HeLa, HT1376, SW480 and A431 cell lysates; Human heart tissue lysate; HeLa cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	K _D = 1.41 x 10 ⁻¹¹ M



Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR4249(2)
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab126604 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		1/1000 - 1/10000. Detects a band of approximately 140 kDa (predicted molecular weight: 122 kDa).
ICC/IF		1/50 - 1/100.

Application notes Is unsuitable for IHC-P or IP.

Target

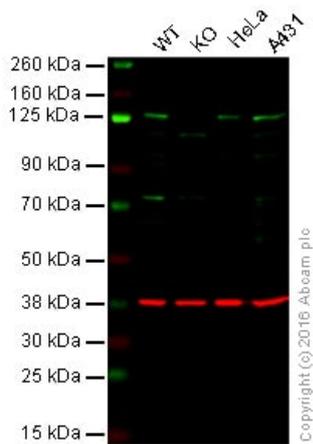
Function Deubiquitinase involved in DNA damage response checkpoint and MYC proto-oncogene stability. Involved in DNA damage induced apoptosis by specifically deubiquitinating proteins of the DNA damage pathway such as CLSPN. Also involved in G2 DNA damage checkpoint, by deubiquitinating CLSPN, and preventing its degradation by the anaphase promoting complex/cyclosome (APC/C). In contrast, it does not deubiquitinate PLK1. Specifically deubiquitinates MYC in the nucleoplasm, leading to prevent MYC degradation by the proteasome: acts by specifically interacting with isoform 1 of FBXW7 (FBW7alpha) in the nucleoplasm and counteracting ubiquitination of MYC by the SCF(FBW7) complex. In contrast, it does not interact with isoform 4 of FBXW7 (FBW7gamma) in the nucleolus, allowing MYC degradation and explaining the selective MYC degradation in the nucleolus.

Sequence similarities Belongs to the peptidase C19 family. USP28 subfamily. Contains 1 UIM (ubiquitin-interacting motif) repeat.

Post-translational modifications Degraded upon nickel ion level or hypoxia exposure. Phosphorylated upon DNA damage at Ser-67 and Ser-714, by ATM or ATR.

Cellular localization Nucleus > nucleoplasm.

Images



Western blot - Anti-USP28 antibody [EPR4249(2)] (ab126604)

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

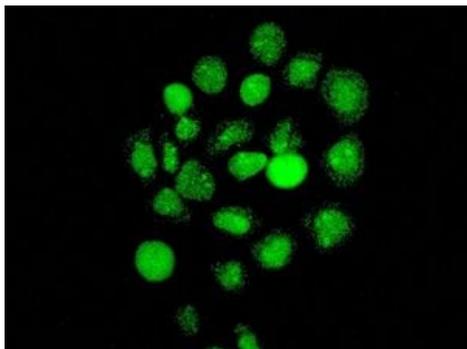
Lane 2: USP28 knockout HAP1 cell lysate (20 µg)

Lane 3: HeLa cell lysate (20 µg)

Lane 4: A431 cell lysate (20 µg)

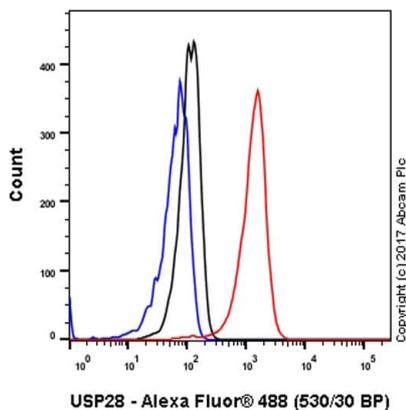
Lanes 1 - 4: Merged signal (red and green). Green - ab126604 observed at 128 kDa. Red - loading control, ab8245, observed at 37 kDa.

ab126604 was shown to recognize USP28 when USP28 knockout samples were used, along with additional cross-reactive bands. Wild-type and USP28 knockout samples were subjected to SDS-PAGE. ab126604 and ab8245 (loading control to GAPDH) were diluted 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 (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



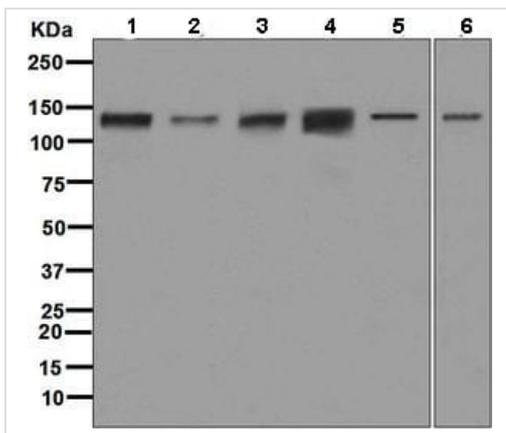
Immunocytochemistry/ Immunofluorescence - Anti-USP28 antibody [EPR4249(2)] (ab126604)

ab126604 at 1/50 dilution staining USP28 in HeLa cells by Immunofluorescence.



Flow Cytometry (Intracellular) - Anti-USP28 antibody [EPR4249(2)] (ab126604)

Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling USP28 with unpurified ab126604 at 1/200 dilution (1 µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488) (ab150077) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) (ab172730) was used as the isotype control, Cell without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.



Western blot - Anti-USP28 antibody [EPR4249(2)] (ab126604)

All lanes : Anti-USP28 antibody [EPR4249(2)] (ab126604) at 1/1000 dilution

Lane 1 : 293T cell lysate

Lane 2 : HeLa cell lysate

Lane 3 : HT1376 cell lysate

Lane 4 : Human heart tissue lysate

Lane 5 : SW480 cell lysate

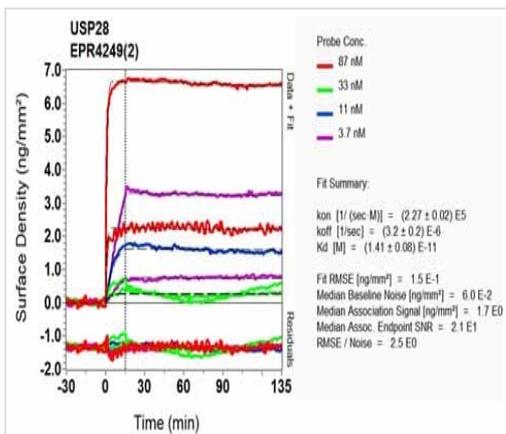
Lane 6 : A431 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 122 kDa



OIR-D Scanning - Anti-USP28 antibody [EPR4249(2)] (ab126604)

Equilibrium dissociation constant (K_D)

Learn more about K_D

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

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-USP28 antibody [EPR4249(2)] (ab126604)

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

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